



LEICESTERSHIRE  
COUNTY COUNCIL  
EDUCATION  
COMMITTEE

*Annual Report*

OF THE SCHOOL  
MEDICAL OFFICER  
FOR THE YEAR  
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J. A. FAIRER  
M.D., D.P.H.

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J. A. FAIRER, M.D., D.P.H.



17 FRIAR LANE,

LEICESTER.

MR. CHAIRMAN, LADIES AND GENTLEMEN,

I have the honour to present my Annual Report of the work of the School Medical Service of the County for the year 1935.

The only change which has occurred in the staff was through the resignation of Dr. D. G. Anderson in October. This meant that for a period of nearly three months the Medical Staff was depleted as Dr. A. A. Lisney, the new Medical Officer, did not commence duty until January, 1936.

The report takes the usual lines of those of the previous years, but I would like to call attention to the commencement of the new combined clinic at Hinckley which was opened in May and has proved an unqualified success.

Although there have been no outstanding changes, the work of the School Medical Service has been maintained at its high standard and I would like to take the opportunity of thanking all the members of the School Medical Service for their valuable co-operation and assistance during the year and particularly would I stress the work of the Deputy Medical Officer of Health, Dr. K. Cowan, in the production of this report.

I am indebted to Dr. Constance Walters for the admirable article on "Fifty-nine Cases of Monocular Blindness."

I would also like to express my appreciation of the unfailing interest of the Chairman in the work of the Department, and to all the members of the Committee for their consideration not only to myself but to all the staff.

I have the honour to be,

Mr. Chairman, Ladies and Gentlemen,

Your obedient servant,

J. A. FAIRER,


*School Medical Officer.*

January, 1936.



## INDEX.

	PAGE.
BLIND, DEAF, DEFECTIVE AND EPILEPTIC CHILDREN -	52
CO-OPERATION OF PARENTS - - - - -	36
CO-OPERATION OF SCHOOL ATTENDANCE OFFICERS -	37
CO-OPERATION OF TEACHERS - - - - -	37
CO-OPERATION OF VOLUNTARY BODIES - - - - -	38
CO-ORDINATION - - - - -	9
CRIPPLING DEFECTS - - - - -	14
DENTAL TREATMENT - - - - -	14, 21-23
DELICATE CHILDREN - - - - -	14
EAR DISEASE AND HEARING - - - - -	13, 20-21
EMPLOYMENT OF CHILDREN AND YOUNG PERSONS -	56
EXTERNAL EYE DISEASES - - - - -	13
FINDINGS OF MEDICAL INSPECTION - - - - -	11-14
FOLLOWING UP - - - - -	16-17
GENERAL STATISTICS - - - - -	7
HEALTH EDUCATION - - - - -	41
HYGIENIC CONDITIONS OF ELEMENTARY SCHOOLS -	57-63
INFECTIOUS DISEASES - - - - -	14-16
MEDICAL INSPECTION - - - - -	10-11
MEDICAL TREATMENT - - - - -	17-21
MENTALLY DEFECTIVE CHILDREN - - - - -	53-55
MINOR AILMENTS - - - - -	12, 17-18
OPEN-AIR EDUCATION - - - - -	35-36
ORTHOPÆDIC TREATMENT - - - - -	28-34
PHYSICALLY DEFECTIVE CHILDREN - - - - -	52
PHYSICAL TRAINING - - - - -	42-51
POPULATION OF COUNTY - - - - -	7
SCHOOL CLOSURES - - - - -	14-15
SECONDARY SCHOOLS - - - - -	55-56
SKIN DISEASES - - - - -	20
SPECIAL REPORT :	
"FIFTY-NINE CASES OF MONOCULAR BLINDNESS" -	64-68
STAFF - - - - -	7-8
SUPPLY OF MILK - - - - -	39-41
TABLES (ELEMENTARY SCHOOLS) - - - - -	69-78
TABLES (SECONDARY SCHOOLS) - - - - -	79-80
TONSILS AND ADENOIDS - - - - -	12, 18-19
TUBERCULOSIS - - - - -	13, 19, 52-53
UNCLEANLINESS - - - - -	11
VISION - - - - -	13, 24-28



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# REPORT.

## I.—GENERAL STATISTICS.

### *Population of the County.*

The estimated population of Leicestershire as returned by the Registrar General in June, 1934, was 312,150. The Borough of Loughborough with a population of 27,280, is the only separate authority for Elementary Education within the administrative County. The total population with which the County Education Committee is concerned for purposes of Elementary Education is therefore 284,870.

### *Number of Schools and Scholars.*

There are 279 Elementary Schools in the County area, 104 Council Schools and 175 Voluntary Schools. The average number of children on the rolls of elementary schools during the year 1935 was 35,989 and the average attendance was 32,376 or 90 per cent.

## II.—STAFF OF THE SCHOOL MEDICAL SERVICE.

School Medical Officer :

J. A. Fairer, M.D., D.P.H. (County Medical Officer of Health).

Deputy School Medical Officer :

K. Cowan, M.D., D.P.H. (Deputy County Medical Officer of Health).

Senior Assistant School Medical Officer and Assistant County Medical Officer of Health :

D. G. Anderson, M.B., Ch.B., D.P.H. (*resigned 1/10/35*).

A. A. Lisney, M.A., M.B., D.P.H. (*appointed 1/1/36*).

Assistant School Medical Officers :

S. E. Murray, M.B., B.S.

J. B. Dalton, M.B., Ch.B.

Mary E. Weston, M.B., B.S.

Constance Walters, B.Sc., M.B., B.Ch. (School Oculist).

School Dental Surgeon :

P. Ashton, L.D.S.

## Assistant School Dental Surgeons :

A. E. Ward, L.D.S.  
 C. L. R. McLellan, L.D.S.  
 D. R. A. Wilcox, L.D.S.  
 L. D. Smith, L.D.S.

The above Officers are all employed full time in the service of the Authority. Dr. Murray and Dr. Dalton devote the whole of their time to School medical work. Dr. Weston devotes two thirds of her time to school medical work and one third to Maternity and Child Welfare. The work of Dr. Walters is equally divided between the Maternity and Child Welfare Services and the examination and treatment of school children suffering from defective eyesight. The work of Dr. Cowan and Dr. Anderson is chiefly concerned with the general administration of the service and the control of its special branches. These two Officers have other duties in the Public Health Service and only a portion of their time is allotted to school medical work.

## SCHOOL NURSES.

\*Mrs. Warren (Superintendent).

†Miss A. Addy, S.R.N.  
 Mrs. A. D. Antrobus, S.R.N.  
 Miss A. J. Bailey, S.R.N.  
 †Miss C. E. Bangham, S.R.N.  
 Mrs. S. J. Bourne, S.R.N.  
 Mrs. P. Brunsdon, S.R.N.  
 \*†Miss G. E. Butler, S.R.N.  
 \*Mrs. F. E. Cade.  
 †Miss G. I. Carryer, S.R.N.  
 †Miss V. L. Davies, S.R.N.  
 Miss M. A. Dilworth, S.R.N.  
 †Miss E. Y. Feakin, S.R.N.  
 Miss L. Fox, S.R.N.  
 Miss T. M. Griffiths, S.R.N.  
 \*Miss K. A. Marsh, S.R.N.  
 †Miss W. C. Porter, S.R.N.  
 Miss E. H. Seabrook, S.R.N.  
 Miss W. A. Simmons, S.R.N.  
 Mrs. E. E. Wright, S.R.N.

All the above are fully trained Nurses and hold the certificate of the Central Midwives' Board. Those marked \* hold the Certificate

of Sanitary Inspector and those marked † have the Health Visitors' Certificate (Ministry of Health). The Superintendent holds the Child Welfare Workers' Certificate.

### III.—CO-ORDINATION.

Close co-operation between the various branches of the Public Health Services is necessary if overlapping is to be avoided and if the potential value of all the work done is to be fully realised. This is particularly the case in the relations between the School Medical Department and the Maternity and Child Welfare Services. These departments although differing in their method of working should function as a unit in the supervision of the health of the child from infancy to adolescence.

Many factors are at work influencing the mental and physical welfare of the child from its earliest years and the infant welfare branch of the service works to prevent such of these as are harmful from exercising an undue influence upon the health and well-being of the infant and pre-school child. The history of these early years if carefully compiled from constant supervision should be of value to the School Medical Officer in making his assessment of the child's state of health at the entrant medical examination at school. Therefore in addition to the immediate and direct value of the records of the work done in preserving the health of the pre-school child they have also an indirect use in the information conveyed to the School Medical Officer if such is made available.

In this County all records pertaining to the health and well-being of the pre-school child, both personal and environmental are passed on to the School Medical Department when the child attains school age. These include not only medical histories obtained at Infant Welfare Centres but also the reports from the periodic visits of the Health Visitors to the home of the child from infancy onwards. Case histories of any special defects, orthopædic visual or otherwise, are also transferred for the use of the School Medical Officers. The Medical Officer at the entrant examination is thus not wholly dependent upon the sketchy history, which is often the only one, obtainable from the parent, as to the previous health of the child and is, therefore, in a better position to assess accurately the physical condition.

It is possible in this manner, to make some attempt to fill the



gap which exists in the supervision of the health of the child between infancy and entrance to school.

A similar gap exists in medical supervision between the time the child leaves school and his coming within the scope of National Health Insurance. There are signs that in the near future this hiatus will be bridged and it may be possible to inaugurate a system of co-operation whereby use may be made of the valuable knowledge gained by Medical Officers during the child's school life to assist his panel doctor in forming his conclusions when called upon.

In other directions close co-operation is also necessary in the adequate supervision of the health of the child at school ; between teachers, school medical officers and district medical officers of health in dealing with outbreaks of infectious diseases ; between tuberculosis officers and the School Medical Department ; between the Education Department and the School Medical Officer in the supervision of the hygienic conditions of schools and in many other ways.

If the School Medical Service is to exercise a real influence over the mental and physical condition of the school child it is insufficient merely to discover defects and have them treated, everything tending to cause disease or defect or to lower the general standard of the child's health in school or out of school must be counteracted by the combined efforts of all workers and this can only be accomplished where complete co-operation exists.

#### **IV.—MEDICAL INSPECTION.**

The schedule of medical inspection has been completed on the lines laid down by the Board of Education. Routine medical inspections have been carried out in the scheduled age groups and special inspections of children referred by teachers or parents have been undertaken at every school in the County.

Re-inspections of all children found to be defective at a previous inspection have also been carried out and the results of treatment recorded or the progress of those under observation.

Routine medical inspections are carried out daily in the schools of the County at morning and afternoon sessions throughout the year and special visits to schools and homes are also made where necessary. Each child when inspected at school is withdrawn from

the class for a period of about half-an-hour and when re-inspected for only a few minutes. Every effort is made to avoid unnecessary disturbance of the school routine but a certain amount of dislocation of the work is inevitable. The provision of a medical inspection room in the modern schools has been of enormous benefit to the medical officer and to the teacher, and as further up-to-date schools are provided equipped in this manner the work of the doctor in school should be greatly facilitated and the minimum interruption of the ordinary work of the school should be made possible.

The total number of children examined in the scheduled age groups at routine medical inspection in the schools was :—

Elementary Schools, 12,275 compared with 11,970 last year.

Secondary Schools, 1,487 compared with 1,351 last year.

(Statistical particulars will be found in Table I. at the end of the report).

In addition to the work of medical inspection in the schools the medical officers made visits to homes where necessary. These visits are usually for the purpose of carrying out examinations of special children, mental defectives, physical defectives, etc., or for the examination of children on account of prolonged absence from school.

## **V.—FINDINGS OF MEDICAL INSPECTION.**

### *(a) Uncleanliness.*

During the year 249 cases of uncleanliness were found at routine and special inspections. In addition to these cases, which were referred to the School Nurses by the Assistant School Medical Officers, the nurses carried out 108,393 inspections of children in the schools. At these inspections 5,135 children were found to be unclean. In 1934 the nurses made 99,743 inspections and 4,243 children were found to be unclean.

These returns would appear to indicate a high proportion of uncleanliness but they include all degrees of unclean conditions from a few nits to infestation with vermin and actually it was only found necessary to exclude twenty cases of a serious nature from schools. In these cases the children are re-examined at the end of a stated period by a Medical Officer and if fit, a certificate is issued and they are allowed to return to school.



In spite of the work of the school nurses in carrying out frequent inspections and visits to homes there are some families who are habitually unclean. If after considerable effort on the part of the nurse the children are returned to school in an improved condition they very soon lapse into the old dirty state. In many of these cases the only remedy is prosecution of the parent and the following procedure is the usual one. When the child has been excluded from school and the parents warned, the child is re-examined by a Medical Officer at the end of the period of exclusion. If there has been no improvement in its condition, the parents are prosecuted by the School Attendance Officer for non-attendance of the child at school. If the home conditions are such that unnecessary suffering to the child's health is being caused the case is referred to the N.S.P.C.C. and the necessary action is left to them. The Officers of the Society have carried out visits of inspection and issued warnings to parents in several cases during the year.

Arrangements are in force for the supply of nit combs to parents at cost price or for their loan in necessitous cases. This provision is of value in cases where parents are willing to make an effort to improve the condition of the children.

(b) *Minor Ailments.*

Children suffering from minor ailments, *e.g.* minor injuries, cuts, sores, impetigo and ringworm are referred either to the School Clinic or to their own doctors for treatment. Only a proportion of these cases are referred from routine inspections, the majority are discovered at special inspections by doctors or nurses or sent by the head teachers.

The more populous areas of the county are served by minor ailment clinics but in Rural areas children are treated by their own doctors or by the district nurse.

(c) *Tonsils and Adenoids.*

During the year 1091 cases of nose and throat defects were referred for treatment from routine and special inspections in the schools. This total comprised 603 children with enlarged tonsils only, 114 with adenoids only, 318 with enlarged tonsils and adenoids and 56 suffering from some other abnormal condition of the nose and throat. In addition 736 children were found with a defect of the nose and throat requiring to be kept under observation.



Amongst the routine examinations 1,433 or 11.3 per cent. of the children were reported as having some defect of the nose and throat. Operative treatment was recommended in 5.7 per cent. of all routine cases. The corresponding figure for 1934 was 6.5 per cent.

The number of cases detected at special inspections was 365 for treatment and 29 requiring to be kept under observation.

(d) *Tuberculosis.*

There were no cases of Pulmonary Tuberculosis discovered at routine inspection and no child examined as a special was found to show definite signs of this disease, but eleven cases suspected by the Medical Officers of having the disease were referred to the Tuberculosis Medical Officers for diagnosis.

Other forms of Tuberculosis referred for treatment were Glands 6 ; Bones and Joints 8 ; and other non-pulmonary forms 2.

(e) *Vision.*

The number of children referred to the Oculist for refraction from routine and special inspections was 1031. In addition 146 children were found to have a refractive error requiring to be kept under observation. The number of cases of Squint referred to the Oculist was 184.

(f) *External Eye Diseases.*

The Medical Officers referred 277 cases of external eye disease to the oculist from routine and special inspections ; of these 117 were referred from routine inspection and 160 from the examination of specials.

The total included 158 cases of Blepharitis, 48 of Conjunctivitis, one of corneal opacity and one of Keratitis. In addition 69 children suffering from other external eye conditions were referred for treatment and observation was recommended in a further 35 cases.

(g) *Ear Disease and Hearing.*

The number of cases of ear defects referred was 196 comprising 32 cases of defective hearing, 109 of Otitis Media and 55 of other disease of the ear.

A further 36 cases were reported as requiring to be kept under observation.

*(h) Dental Defects.*

Sixty-four cases requiring urgent dental treatment were referred from medical inspections in the schools. The number of children found at medical inspection to have more than three carious teeth was 1,757.

*(i) Crippling Defects.*

The number of cases of crippling defects referred during the year was 114, for treatment 69 and for observation 45. Of the cases for treatment seven were diagnosed as spinal curvature, four as rickets and fifty-eight were other forms of crippling defect.

*(j) Delicate Children.*

The number of delicate children on the register at the end of the year was 188. These children include those who are classified as pre-tubercular and a large proportion would benefit from attendance at an open-air school. A small number may be admitted to convalescent homes during the year through such voluntary agencies as the Saturday Hospital Fund, but the vast majority are in attendance at public elementary schools although their physical condition would warrant some special provision being made for them.

## VI.—INFECTIOUS DISEASE.

Measles was again prevalent during the year in the schools of the County and there was also an increase in the number of cases of Diphtheria notified but no serious outbreak of infectious disease occurred.

It was found necessary to close fifteen schools for the causes set out in the following table :—

	No. of Schools.	Average Period in "School" Days.	No. of Children Affected.
Measles .....	9	14	479
Diphtheria.....	2	14	147
Mumps .....	1	12	30
Scarlet Fever .....	1	16	87
Whooping Cough .....	1	10	216
Influenza and Colds.....	1	8	18
	—		—
	15		997
	—		—

Certificates of low attendance due to the prevalence of infectious diseases are issued and the following is a summary for the year :—

	No. of Schools.	Average Period in “School” Days.	No. of Children Affected.
Measles .....	31	9	2,335
Whooping Cough .....	14	7	1,042
Chicken Pox .....	7	7	722
Mumps .....	7	5	739
Coughs and Colds.....	5	6	111
Influenza .....	2	8	29
Diphtheria.....	1	10	73
Chicken Pox and Measles ....	1	13	28
Mumps and Measles.....	1	8	190
Scarlet Fever and Colds .....	1	4	206
	—		—
	70		5,475
	—		—

Special visits to four schools were made on account of outbreaks of Diphtheria. Swabs of the throat or nose were taken from children in the suspected classes and six positive results were obtained from these swabs. Children found to be carriers were excluded from school until free from infection.

The formation of Central Schools has given rise to some difficulty in connection with the control of infectious diseases. Children of eleven years and over are drawn from a wide area and transported daily to the central school in buses. Younger members of the same families continue to attend the Junior schools in or near the villages in which they reside. If a child who attends a Junior School is attacked by an infectious disease which requires exclusion of contacts from school and he has an elder brother or sister in attendance at the Central School, some system of acquainting the Head Teacher of the latter school must be in force, if the senior child is to be excluded in accordance with the regulations. Moreover, if an epidemic occurs in a particular area it may be necessary to prevent all children from that area attending the central school or using the school buses. Again, is the Education Authority justified in bringing some hundreds of children daily from unaffected outside areas into a central school if there is an epidemic of infectious disease in the district in which the school is situated?



In this county the grouping of children in central schools is in an advanced stage and almost eighty-eight per cent. of the school population has been dealt with in the scheme of re-organisation, whilst the average for English and Welsh Counties is only forty per cent. It was therefore found necessary to formulate new rules for the use of teachers in dealing with infectious diseases and these were published in my report of last year. These rules have worked well and no great difficulty has been experienced in their application. They allow of the preliminary steps being taken by the head teachers but ensure that the School Medical Officer or District Medical Officer of Health will be consulted sufficiently early to take such action as may be necessary to prevent a serious spread of the disease.

It has been stated that the problem is one of little moment as the commoner infectious diseases affect only the younger children. More serious conditions like Scarlet Fever and Diphtheria which also affect the senior children may obtain a widespread hold and infect a large area, if early precautions are not taken to minimise the possibilities which present themselves on account of the greatly increased opportunities for contact amongst children under the new system.

## VII.—FOLLOWING UP.

During the year the school nurses made the under mentioned number of visits for purposes of following up.

First visits.....	2,239
Second visits.....	80
Third visits.....	20
Special visits.....	603

All children found at routine or special medical inspection to be suffering from a defect which requires treatment are referred to their own doctor or invited to make use of the facilities available in connection with the various treatment schemes.

Children whose parents avail themselves of the treatment provided by the Local Authority can be followed up throughout their period of treatment at clinics and treatment centres but where the parents states that treatment will be sought from a private practitioner it is necessary to follow the subsequent course of events through visits made to the home. These are usually made by the

school nurse or, where the parent has failed to obtain treatment by a medical officer. The same applies to children excluded from school suffering from infectious or contagious diseases.

It is usually found that parents are only too willing to have any necessary treatment carried out, but in a few cases the importance of this measure is not realised. If after persuasion has been tried, no effort is made to seek treatment and the condition is such that the child is caused unnecessary suffering, the N.S.P.C.C. may be notified, and a visit from one of their officers is usually sufficient to ensure that remedial measures will be undertaken. During the year the N.S.P.C.C. dealt with several cases affecting the welfare of children and the desired object was attained in all cases without recourse to prosecution.

An adequate system of following up of children suffering from defects requiring treatment is essential if the results of medical inspection are to be satisfactory. The whole ultimate aim of the service depends upon the existence of satisfactory measures for treatment and upon full use being made of them and the following up of defective children is the main link in the chain between detection and cure.

### **VIII.—MEDICAL TREATMENT.**

#### *(a) Minor Ailments.*

There are three minor ailments clinics in the County, at Hinckley, Coalville and Melton Mowbray. The Clinic at Lubbesthorpe was transferred to the City of Leicester Education Authority on 1st April, as it was included in the area taken over by the City in their extension of boundaries.

A clinic session is held every Saturday morning at the Central office in Leicester for the examination of urgent cases referred by School Nurses, School Attendance Officers and Head Teachers. This session is also useful for the further examination of difficult cases encountered by the Medical Officers at their inspections in schools.

The number of minor defects treated at the clinics is shown in Table IV. of the appendix to this Report. There is a considerable fall in the number of defects treated, 1,342 this year as compared

with 2,042 last year. This is to be accounted for by the closure of the clinic at Lubbesthorpe on the 1st April.

The number of attendances at the clinics is as follows :—

	Children	Attendances
Hinckley School Clinic.....	517	1,065
Lubbesthorpe School Clinic....	351	590
Coalville School Clinic.....	318	1,222
Melton Mowbray School Clinic	392	1,136
Central Office.....	183	209
	<hr/>	<hr/>
TOTAL	1,761	4,222
	<hr/>	<hr/>

The clinics at Coalville and Melton Mowbray are held twice weekly, the school nurse being in sole charge of the second session. The same procedure was in force at Lubbesthorpe until its closure. Hinckley and the office clinics are held on one morning each week—Tuesday and Saturday respectively.

The school clinic at Hinckley was transferred to the new Health Centre in May of this year. The premises in which the clinic was held previously were unsuitable, and the work has been rendered very much easier in the new building, which has a large waiting hall, doctor's consulting room and accommodation for all necessary forms of treatment.

*(b) Tonsils and Adenoids.*

During the year the medical officers have referred 1,091 cases for operative treatment, Tonsils only 603, Adenoids only 114, Tonsils and Adenoids 318 and other conditions of the nose and throat 56.

Last year the number of cases referred for treatment was 1,179 ; there has thus been a definite decrease in the number of cases requiring operation.

The total number of children who received operative treatment during the year was 368 and with the exception of 54 arranged privately all the operations were carried out under the Authority's scheme.

The operations undertaken through the Authority's Scheme were performed at the Leicester City Clinic, the Loughborough General Hospital and the various Cottage Hospitals as follows :—



Leicester City Clinic.....	239
Melton Mowbray Hospital.....	39
Loughborough General Hospital.....	10
Ashby Cottage Hospital.....	11
Market Harborough Cottage Hospital.....	9
Hinckley Cottage Hospital.....	6

These 314 cases cost approximately £438 but of this amount £195 was contributed by the parents leaving a net amount of £243 chargeable to the Committee. The previously adopted scale of charges is still in operation and has worked very satisfactorily.

During the last eight years the number of children on whom tonsillectomy has been performed is 3,499 and of this number 2,956 have been dealt with through the Local Authority's Scheme. The number of children submitted to operation for chronic inflammation of the tonsils and for adenoids has never been excessive and due attention has always been paid to the possibility of amelioration of the condition by conservative treatment before operation is recommended. Every case prior to operation is certified by an Assistant School Medical Officer to require operative treatment and is then referred to the operating surgeon for a preliminary examination and a final opinion as to whether or not he confirms the diagnosis and also recommends an operation. No operation is undertaken without these preliminary examinations even though the case has been referred by a private practitioner. It can, therefore, be said with confidence that every precaution is taken to prevent any unnecessary operative interference.

(c) *Tuberculosis.*

Treatment for children suffering from Pulmonary Tuberculosis is undertaken at the County Sanatorium, Markfield. The children's Ward has twenty-two beds and facilities are available for carrying on the education of the children whilst in the institution, a teacher being included in the staff. During the year 46 school children were admitted to Markfield Sanatorium.

Cases of surgical Tuberculosis are admitted to the Orthopædic hospitals at Coleshill, Harlow Wood and Leicester and ten children were admitted in 1935 to these institutions. Out-patient treatment is available at the orthopædic clinics at Coalville, Hinckley, Loughborough and Leicester and at Leicester Royal Infirmary.

(d) *Skin Diseases.*

The treatment of diseases of the skin is carried out at school clinics in the areas where these are situated. In other areas treatment is undertaken by private practitioners.

Impetigo is still the most common skin complaint encountered at school clinics and 141 such cases received treatment during the year. In addition 110 children received treatment privately for this complaint.

The number of cases of Scabies treated at School Clinics was thirteen this year as compared with fourteen last year.

Local treatment of Ringworm of the scalp and body is undertaken at the various school clinics by the Assistant School Medical Officers and 24 cases attended for treatment during the year. Local treatment of Ringworm of the scalp is often of prolonged duration and much time is lost from school. This disadvantage can be overcome to some extent by allowing children to return to school wearing a special cap but there is reluctance on the part of the children to do so as they are sensitive about appearing amongst their colleagues specially garbed. It is not considered wise to press for their attendance in these circumstances.

In a small proportion of cases it is possible to obtain the consent of parents to treatment of the condition by X-Rays. An arrangement exists with the Leicester City Education Authority for the treatment of County cases at the Leicester City Clinic and those cases, where it is considered suitable and the parents are willing, are referred for this form of treatment to the City Clinic.

Examination of specimens of hair as an aid to diagnosis and as an indication of cure are carried out at the County Laboratory. During the year 28 specimens of hair were submitted for examination by medical officers of which 9 were positive.

The number of cases of other forms of skin disease which received treatment at the school clinics during the year was 125.

(e) *Ear Diseases and Defects.*

By arrangement with the Leicester City Authority, County cases suffering from diseases and defects of the ear are treated at the Leicester City Clinic. Details of this provision were given in my annual report of last year.

During the year 213 cases were referred to the City Clinic, of these 35 did not attend or refused treatment. The children who were treated made 401 attendances, thirty-five were recommended for operation for the removal of tonsils and adenoids and 110 were discharged as cured. The remainder are either still in attendance or discontinued treatment before being discharged as cured.

### **IX.—DENTAL TREATMENT.**

During the year 25,440 children have been inspected during the course of routine dental inspection. This number would have been somewhat larger but for the serious illness of one of the dental staff towards the end of the year.

This also accounts for the fact that it was impossible to complete the inspection and treatment of the children attending two of the senior schools in the County during the year. The children in these schools, however, will be inspected and treated as early as possible during 1936.

The number of routine inspections has increased by 3,415 as compared with last year's figure. As the scheme has had the benefit of an extra dental surgeon for the whole of the twelve months this increase was of course, expected.

The number of children referred for treatment was 14,350 of whom 9,618 accepted. Refusals have increased from 27 per cent. last year to 32 per cent. for the period under review. This increase may to some extent be due to the inauguration at the beginning of the year of a system of payment by parents for the dental treatment of their children.

It is impossible to state definitely at this stage the exact effect of these charges on the number of refusals but it is significant that the percentage of refusals has increased considerably.

I am still inclined to think, however, that the primary cause of the large percentage of refusals is the one quoted in my last year's report, and until such time as it is possible to inspect and treat each child in the county annually I cannot foresee any appreciable improvement in this figure.

During the year the Dental Board of the United Kingdom kindly arranged for a lecturer to give talks to the children in several



of the senior schools in the county. These talks were excellent in every way and were easily understood by the children ; in addition a very fine collections of models were on view and after being explained, the children were encouraged to ask questions. It will be interesting to note during next year what effect these lectures have on the number of refusals.

This propaganda work was most welcome to my staff and myself, as it is surprising how little the children really know concerning their teeth and the work of the Dental Service. When asking the children in school what a dentist is for, one is invariably met with the reply "a man to pull teeth out." The number of children who reply that the dentist is "the man who looks after the teeth" is certainly in the minority.

The old idea that teeth are better extracted and artificial ones substituted is very slow in dying.

I am pleased to be in a position to report the increased amount of conservative work undertaken during the year ; 14,133 fillings have been inserted as against 12,219 last year.

The average number of fillings required per child treated was 1.57. Last year's figure was 1.4.

General anæsthetics have been administered in 171 cases where multiple extractions of permanent teeth were necessary, all cases requiring extraction of single permanent teeth are undertaken with local or regional anæsthesia by injection. Difficult temporary teeth are also dealt with in this way but the majority are extracted with the use of the ethyl chloride spray.

All general anæsthetics are given with the assistance of a Medical Officer.

The Saturday morning clinics have been continued weekly at Leicester and Hinckley, and fortnightly at Coalville and Melton. The number of children who attended the clinics was 903, a considerable decrease on last year's figure of 1,141.

This decrease is entirely due to the extension of the City Boundary. Several large schools, from which children attended for casual treatment, have now been transferred to the City and treatment is provided by the City Education Authority.

I would again like to call attention to the fact that every child treated has received a complete treatment, every unsound permanent tooth was made artificially sound and all septic permanent or temporary teeth removed.

The expenditure in connection with any dental service would be absolutely wasted unless this state of affairs was the ultimate result.

It was decided by the Committee some time ago that all treatment recommended by the Dental Surgeon must be accepted as it is obviously absurd to remove septic temporary teeth and leave decayed permanent teeth to eventually become unsaveable.

This system certainly adds to the number of refusals but to do otherwise would I am convinced be an unsound method. The refusal figure would be considerably lower and consequently very misleading in assessing the value of the scheme.

At the end of the year 1934, the auditor called attention to the fact that no contributions were collected from parents for dental treatment as required by Section 81 (1) of the Education Act, 1921.

A scheme was therefore submitted to the Committee and approved by the Board of Education whereby parents who were not necessitous were charged 6d. per child for each year's treatment. Necessitous cases were to receive treatment free of charge.

This system of payment for treatment came into operation in January, 1935 and during the year this worked very satisfactorily. Most of the work in connection with the collection of the fees and keeping of records devolves on the dental attendant and very little of the dentist's time is required in this direction. During the year the amount collected was approximately £100.

In conclusion I would again express my thanks to the dental staff for their wholehearted support and also my appreciation of the help I have at all times received from the Medical Officers, Nursing Staff and Teachers.

PERCY ASHTON,

*School Dental Surgeon.*

**X.—TREATMENT OF DEFECTIVE VISION.**

The examination of children with defective vision has been continued by the School Oculist throughout the year. All cases discovered by the Assistant School Medical Officers are immediately referred to the Oculist for refraction together with any cases brought to the notice of the department by Head Teachers, School Nurses or Parents.

The School Oculist also undertakes the re-examination of cases refracted two or more years ago and a considerable number of these children are found to require further refraction.

During the course of Routine and Special examinations the Assistant School Medical Officers have referred 1,492 cases during the year, 948 from routine and 544 from special inspections. A considerable number of these children were wearing glasses previously prescribed by the School Oculist but on examination were found to require further refraction as the lenses had become unsuitable.

These 1,492 cases included the following :—

Blepharitis 158, Conjunctivitis 48, Keratitis 1, Corneal Opacities 1, Defective Vision 1,031, Squint 184 and other conditions 69.

In addition to these cases the School Oculist herself discovered 466 children requiring first examination or further refraction as a result of re-inspections.

Arrangements were made for 2,005 children to be examined by the Oculist but of this number 46 refused treatment, 53 were absent and 67 not properly prepared with atropine ointment.

The number of completed examinations was therefore 1,839 and is summarised as follows :—

Glasses not necessary	....	....	....	224	}	326
Present glasses satisfactory	....	....	....	102		
Refractive errors only and requiring glasses	1,381			}	1,513	
Other diseases of the eye and refractive errors requiring correction	....	....	....	132		

The total number of children requiring correction by glasses was, therefore, 1513, and these cases are summarised as follows :—



1,006 (66.42%)	cases of Hypermetropia
338 (22.35%)	cases of Myopia
134 ( 8.86%)	cases of Mixed Astigmatism
35 ( 2.31%)	cases of Myopia and Hypermetropia

A record has also been kept of any child showing signs of Strabismus as follows :—

Internal concomitant Strabismus.....	80
External                   ,,                   ,, .....	23
Internal alternating                   ,, .....	35
External                   ,,                   ,, .....	2
	<hr/>
	140
	<hr/>

A summary of the cases refracted during each of the last five years is as follows :—

	Hypermetropia	Myopia	Mixed Astigmatism	Myopia and Hypermetropia	Squint
1931	72.5%	17.0%	9.7%	1.35%	17.0%
1932	70.4%	21.4%	6.13%	1.52%	17.0%
1933	67.37%	20.84%	9.43%	2.34%	9.9%
1934	67.53%	21.82%	8.69%	2.58%	12.14%
1935	66.42%	22.35%	8.86%	2.31%	9.25%

It will be noted that the percentage of children suffering from Myopia has again increased and is the highest yet recorded. In April, 1935, the Leicester City Boundary was extended and a considerable number of children were transferred to the Leicester City Education Authority. Advantage was taken of this opportunity to carry out a yearly inspection of a greater number of Myopic cases than in previous years. It is of the utmost importance that these children should be examined annually and it is hoped that with the extra time afforded it will in future be possible to carry this out.

The following diseases were diagnosed during the examination of children with defective vision and they are arranged under their anatomical headings :—

#### *Eyelids.*

Styes 28 ; Blepharitis 75 ; Meibomian Cyst 2 ; Ptosis 4 ; Oedema Eyelids 1.

*Conjunctiva.*

Catarrhal Conjunctivitis 42.

*Lachrymal Apparatus.*

Chronic Dacryocystitis 1.

*Cornea.*

Corneal Ulcer 1 ; Superficial Keratitis 2 ; Parenchymatous Keratitis 2 ; Corneal Nebulæ 21.

*Uveal Tract.*

Posterior Synechiæ 2 ; Iridectomy Wounds 1 ; Coloboma Iris and Chorioid 2 ; Buphthalmos 1 ; Macular Chorioiditis 2 ; Anterior Chorioiditis 1.

*Lens.*

Anterior Polar Cataract 1 ; Posterior Polar Cataract 1 ; Zonular Cataracts 4.

*Optic Nerve.*

Primary Optic Atrophy 1.

*Muscular Apparatus.*

Congenital Nystagmus 13.

### **Provision of Spectacles.**

Spectacles are still obtained by parents through the department and under the same conditions as previously mentioned in my Annual Reports.

The total number of glasses obtained by the parents or supplied free by the Committee was 1,408. This figure is very satisfactory when compared with the number of children for whom glasses were prescribed—1,513.

Of the total of 1,408 the Committee provided 202 pairs of glasses free of charge for necessitous cases. In every other case the glasses were obtained through the department but paid for by the parents themselves.

The types of frames obtained were as follows :—Shellite 439 ; Gold 49 ; Nickel 441 and new lenses only 479.

As will be seen from these figures a large number of children merely have a change of lenses. This means a considerable saving to the parents especially in cases requiring frequent changes of lenses. Only where the frames are damaged or too small is it necessary for new glasses to be provided.

A considerable number of parents continue to avail themselves of the facilities provided for repairs to glasses. When this system of repairs was first started only a very few cases passed through the department, but it has now become a regular undertaking and no less than 246 pairs of glasses were repaired during the year. These repairs consist of new frames, side pieces, bridges or lenses and are all carried out by the firm of opticians who supply the glasses.

In addition to the 1,408 pairs of glasses obtained through the department 51 parents obtained glasses privately. These were all under private treatment at the time arrangements were made for their refraction and are not included amongst the children examined by the oculist.

There are 105 children for whom glasses were prescribed but who have not yet been provided for. These cases will be reminded that glasses are necessary and it is more than possible that a large proportion will eventually be obtained.

As in previous years pressure is only brought to bear on the parents of children with serious defects (mostly short-sighted children). These cases are dealt with through the officers of the N.S.P.C.C. and one visit from an inspector is usually sufficient to persuade the parents that glasses are really necessary.

### **RE-INSPECTIONS.**

The re-inspection of old cases has again occupied a certain amount of time of the School Oculist. Any child refracted two or more years ago has been seen again when the Oculist visited the child's particular school.

Arrangements were made for 901 children to be re-examined but it was found that 57 had left school, 41 were absent and 26 were receiving private treatment. The remaining 777 children were all seen by the Oculist and classified in the following groups :—



(1) For further refraction.....	466
(2) Had worn glasses but were no longer necessary .....	113
(3) Glasses not necessary at first inspection and still unnecessary.....	100
(4) Glasses not provided and case not severe enough for pressure.....	23
(5) Present glasses satisfactory.....	75

Of the cases in group (1), 365 have already been refracted during the year and found to require a change of one or both lenses. The remaining 101 will be refracted as early as possible in the coming year.

The 113 cases in group (2) were found sufficiently improved to be able to discard their spectacles altogether. This number is a considerable increase on last year's figure and again goes to prove the value of re-inspection.

In Group (3) are included the cases with slight defects who did not require glasses at their first inspection and who on re-inspection were still considered satisfactory without the aid of glasses.

Group (4) contains children with slight defects who were recommended to wear glasses but whose parents refused to supply them. These cases were not severe enough to warrant any pressure but it is advisable to re-examine them from time to time.

The last group (5) is composed of children wearing glasses previously prescribed and which were still satisfactory.

## **XI.—COUNTY ORTHOPÆDIC SCHEME.**

The scheme for the treatment of crippling defects amongst children now covers the whole County. The new out-patient orthopædic clinic at Hinckley was opened in May of this year and is proving very successful. Clinics for out-patient treatment are now available in various parts of the County within comparatively easy reach of all centres of population. Certain of these clinics operate entirely under the control of the County Council and at the remainder an arrangement for treating County cases exists either with a Voluntary Association or with a neighbouring authority. Details of the situation and working arrangements are set out in subsequent paragraphs.

The administrative control of the scheme is central and all arrangements for treatment either in-patient or out-patient or for the supply of surgical apparatus and appliances and in connection with its financial aspects are undertaken from Leicester. Registers of attendances at the various out-patient clinics and records of admission to and discharge from hospital and of the progress of patients are also kept at the Central Office. There is thus complete uniformity of administration in dealing with the patients at each of the out-patient Clinics and in the various hospitals to which patients have to be admitted.

Although treatment is carried out by different Orthopædic Surgeons at the various clinics and hospitals, continuity is secured by the fact that each out-patient clinic forms a complete unit with its parent orthopædic hospital, the same staff dealing with the treatment in its out-patient stage and while the patient is in hospital. Observation and after care upon discharge from hospital are also carried out by the same staff as have dealt with the patient throughout all the earlier stages.

In the sphere of ascertainment special arrangements which have been detailed in previous Annual Reports, are in force to secure the earliest possible detection of crippling defects amongst the child population. The scheme deals with all children in the County from infancy to adolescence and special attention is directed to early ascertainment during pre-school life. It is gratifying to know that the proportion of early defects referred for treatment has increased considerably and that cases of gross deformity resulting from neglect to secure adequate treatment early have diminished enormously. Steps have been taken to impress upon parents at Infant Welfare Centres the importance of securing treatment for slight variations from the normal and of the measures to be adopted for the prevention of crippling diseases.

I mentioned in my report of last year that difficulty had been encountered in obtaining sanction for expenditure for immediate and urgent treatment and that an income scale had been drawn up for the assessment of charges to parents in order to overcome this difficulty. The scale was approved in the first instance for an experimental period of six months but at the expiry of this period it was found to have been so successful in its operation that it was adopted by the respective Committees concerned as a permanent arrangement. Comparatively little trouble is now experienced in securing guarantees of payment from the parents as the scale is a



generous one and applies equally to all, and it has resulted in the abolition of serious delays in applying treatment to urgent cases.

The orthopædic section of the health centre at Melton Mowbray was closed in November 1934 owing to the small number of patients who had attended and the few cases in attendance were transferred for treatment to the Leicester City Clinic which is under the control of the same orthopædic surgeon. This step was recorded in my annual report of last year. Unfortunately, during the Summer of this year an outbreak of Infantile Paralysis occurred in the Melton Mowbray area and fourteen cases were notified. Of this number five died and a residual paralysis of greater or lesser extent, but requiring treatment, occurred in six of the remaining cases. Two of these cases required and were given immediate in-patient treatment, one refused treatment of any kind and the remainder are undergoing out-patient treatment at Melton Mowbray War Memorial Hospital. It will be necessary to make some arrangement with the Authorities of this hospital for repayment of the cost of this treatment in the case of children under sixteen years as the small number of cases would not justify re-equipping the orthopædic clinic at Melton Mowbray. This matter will be considered by the appropriate Committees early in 1936.

The new health centre at Hinckley commenced working in May. It is designed on similar lines to those already in existence at Coalville and Melton Mowbray but has a larger waiting-hall and an extra consulting room. The building includes accommodation for infant welfare centre, ante-natal clinic, tuberculosis dispensary, school clinic and orthopædic clinic. The orthopædic section is completely equipped for all forms of out-patient treatment, including plaster work and remedial exercises and a lamp for treatment by ultra violet radiation is included.

The surgeon in charge is Mr. F. G. Allan, F.R.C.S. of Coleshill Hospital, Birmingham and the nursing staff are also drawn from the same hospital. The clerical work involved in keeping records, making appointments for patients, etc., is carried out by a school nurse. The clinic has been very successful and the large number of patients already treated is evidence that it fills a long felt need in that area.

#### *Ascertainment of the number of Cripples.*

Children suffering from crippling defects are referred for treatment from various sources. School Medical Officers refer a certain number as a result of routine and special examinations at Schools



or from school clinics ; other cases are brought to the notice of the Department through School Nurses, School Attendance Officers and from Voluntary Agencies. Defects and deformities amongst infants and pre-school children are discovered at Infant Welfare Centres and also by health visitors in the course of their domiciliary visits. A certain number of cases are referred from Voluntary Hospitals where they have been admitted during the acute stage of illness and after a period are found to require prolonged orthopædic treatment which is outside the province of the ordinary voluntary hospital.

Special attention is paid to the necessity for the early ascertainment and treatment of crippling defects. Health Visitors report every case of deformity however slight, discovered in the course of their home visits and these cases are followed up by a Medical Officer with a view to appropriate treatment being offered. If prolonged periods of treatment are to be avoided and successful end results to be obtained it is essential that every case should be referred for treatment at the earliest possible stage of defect and the success of the orthopædic scheme depends to a large extent upon the arrangements made to secure early ascertainment.

#### *After-Care Supervision.*

In order to prevent relapse and to maintain restored function, it is important that there should be adequate supervision of cases discharged from hospital. This is undertaken at out-patients' Clinics and all cases upon discharge from hospital are asked to attend the appropriate out-patient clinic for observation and supervision and for such further treatment as may be necessary. Treatment at the clinics is continued by the same staff as dealt with the case in hospital.

If necessary, children are followed up in their own homes by visits from school nurses and in those areas where a voluntary association exists, by visits of members of the association.

There are some matters in connection of the welfare of the crippled with which it is not possible to deal officially. These are mainly concerned with the social welfare of the cripple and where Voluntary Associations exist much can be done to assist in alleviating the burden which the crippled boy or girl has to bear. There is room in the County for much more voluntary assistance. In certain areas the official scheme is supplemented by a considerable volume of voluntary effort but generally speaking not a great deal is done beyond the scope of the Authority's scheme and there is need for

an association or associations upon whom reliance could be placed to do something to assist with transport, home environment, securing of employment and in many other ways.

### *Clinics and Hospitals.*

The following are the out-patient clinics with the respective parent hospitals included in the orthopædic scheme.

#### *The Coalville Clinic.*

This clinic is administered directly by the County Council and is open on two afternoons, Mondays and Wednesdays, per week from 1.30 p.m.

Treatment is in the hands of Mr. Allan, of Coleshill Hospital, who attends at one session per month when all new cases are examined and the treatment of those already in attendance is reviewed.

The staff consists of a fully trained Orthopædic Sister, an orthopædic nurse and a masseuse from Coleshill Hospital and a school nurse who takes charge of the clerical work, arranges appointments for the patients, and keeps the records.

This clinic with the parent hospital at Coleshill forms a complete clinical unit for the treatment of all patients from the Coalville area.

#### *The Hinckley Clinic.*

This clinic is also administered by the County Council and is open for treatment on two half-days per week, Wednesdays and Fridays, from 9.30 a.m.

Mr. Allan, of Coleshill Hospital attends the Clinic at one session per month when all new patients are examined and the treatment of those already in attendance is reviewed.

The staff consists of an orthopædic sister, orthopædic nurse and a masseuse from Coleshill Hospital and a school nurse attends to the clerical work.

The clinic was opened in May of this year and forms a complete clinical unit with Coleshill Hospital.

*Leicester City Clinic.*

An arrangements exists between the County Council and the Leicester City Council for the treatment of County cases at the City Orthopædic Clinic, Richmond House, Leicester. The cases referred to this clinic are those living in county areas adjacent to Leicester.

All forms of out-patient treatment are available, the surgeon being Mr. Morris, Orthopædic Surgeon to the Leicester City Authority. The parent hospital in connection with this clinic is the City General Hospital, Leicester where Mr. Morris is in charge of the orthopædic wards.

*Loughborough Cripples' Guild.*

The Loughborough Clinic is controlled by the Voluntary Association, the Loughborough Cripples' Guild, and payment is made to the association by the Leicestershire County Council and the Loughborough Borough Council according to the number and nature of the treatments received by patients from their areas.

The Staff consists of Mr. Malkin, Orthopædic Surgeon to the Harlow Wood Hospital, Nottinghamshire, who visits the Clinic once a month ; the orthopædic sister who attends once a week from Nottingham, one masseuse who is employed whole time and four Voluntary workers.

The clinic is open all the week for massage and other forms of treatment.

The Loughborough Cripples' Guild is associated with the Nottingham Cripples Guild and forms a complete clinical unit with the parent hospital at Harlow Wood.

*Work of the Orthopaedic Clinics.**(a) Coalville Clinic.*

During the year 95 sessions were held and 2,629 attendances were made by children suffering from some form of crippling defect. Last year the corresponding figures were 96 and 2,702.

The types of treatment given were Muscle re-education 523 ; Electrical treatment 934; Radiant Heat 151; Sunlight treatment 354;



Application and supervision of Splints 62 ; Plaster treatment 97 ; Dressings 57 ; and in addition 462 General Supervision and after-care examinations were made.

The number of children who attended was 185.

(b) *The Hinckley Clinic.*

At this clinic 55 sessions were held and 821 attendances were made by children with crippling defects.

The types of treatment given were Muscle re-education exercises 296 ; Electrical treatment 293 ; Radiant Heat 14 ; Sunlight treatment 16 ; application and supervision of splints 50 ; plaster treatment 15 ; Dressings 10 ; and 186 general after-care examinations were made.

The number of children who attended was 85.

(c) *Loughborough Cripples' Guild.*

The following treatments were given at this clinic to County cases :—Massage 41 ; Electrical treatment 42 ; Exercises and re-education 20 ; Artificial Sunlight 0 ; Plaster and Splints 10 ; Dressings 15 ; and 21 general supervision and after-care examinations were made. A total of 103 attendances were made at this clinic by County cases during the year.

The number of individual children who attended was 7.

(d) *Leicester City Clinic.*

During the year 5 new cases were referred from the County to this clinic. Of these 4 were recommended for treatment. The number of attendances made for out-patient treatment was 229.

(e) *In-Patient Treatment.*

The following is a summary of the cases who received in-patient treatment during the year.

Hospital.	Males.	Females.
Coleshill Hospital ....	15	13
Harlow Wood Hospital ....	1	2
City General Hospital, Leicester	7	2

Of the total of 40 cases admitted during the year 18 still remained in hospital on 31st December, 1935.

## XII.—OPEN-AIR EDUCATION.

The subject of open-air education for special types of children has received considerable attention during recent years. With a greater appreciation of the benefits of sunshine and fresh air amongst the general population there has been a concurrent move to enable children at school to live and work under the best possible environmental conditions. The general body of children at school are gradually being provided with modern, well-lighted, well-ventilated and adequately heated buildings, and the time is not far distant when all schools will conform to a certain standard of hygienic construction.

The progress made in this direction is encouraging but it serves to remind us of the equal need of the delicate child for even better conditions. Children who suffer from Anæmia, who are convalescing from illness, or whose general health is below par and those who come into the category of pre-tubercular require to work in an environment as closely approximating to open air as is possible consistent with adequate protection from the elements. They also require more constant medical supervision than their normal healthy fellows and the routine followed during their working hours should be such that improvement in their physical condition should be given precedence over their educational needs.

It is only at an open-air school that these fundamental principles can be applied and it is for this reason that such provision should form part of the educational system of every Local Authority. There are, in every large area, many children whose poor physical condition can only be improved by a course of open-air treatment and the experience of medical officers of Local Authorities who have established open-air schools shows that a sojourn in such a school will effect a surprising improvement in the health of many delicate children and enable them to return to their ordinary school and resume their work on a level with healthy children. If the delicate child is forced to remain at an ordinary school, the handicap of his poor physical condition imposes an undue strain, in his attempts to compete with his healthy colleagues, and in addition to the probable deterioration in his health he is in no state to derive anything like a full measure of benefit from the educational facilities provided.

There is as yet no special provision in the County for the education of delicate children in open-air schools. Something is done by means of playground classes in suitable weather and in the modern schools

by open-air classrooms but there is a definite need for an open-air school where education in suitable surroundings is carried out on a systematic basis and a daily routine under medical supervision is imposed with the primary object of improving the health of the child. It is hoped that it may become possible in the not far distant future to make some provision of this nature and thus fill an obvious gap in the system of supervision of the health of the children in the schools of the County.

### **XIII.—CO-OPERATION OF PARENTS.**

Parents are invited to be present at the routine medical examination of their children in the schools and quite a considerable number avail themselves of the invitation. The presence of the parents is particularly useful at the entrant and intermediate examinations where the child is too young to be able to give an account of its previous history and it is at these examinations that the greatest proportion of parents attend.

The public are now fully aware of the benefits of medical supervision of children at school and it is very unusual to receive a refusal of medical inspection at an elementary school. Parents are only too willing to avail themselves of the opportunity of the doctor's visit to reassure themselves as to the health of the child and the full measure of co-operation obtained from them is of the utmost value to the service. The ultimate responsibility for the welfare of the child devolves upon the parents and without their help and willing co-operation nothing could be accomplished. It is therefore a matter of importance to make every effort to obtain their goodwill and a little time spent in explanation or in elaboration of some point in connection with the child's health is worth while through its favourable reaction on the attitude of the parent to the whole system.

Parents also continue to make good use of the school clinics for the treatment of minor ailments and as centres where they can obtain advice of a Medical Officer upon the health of their children. The clinics meet a need in the areas where they are situated and their usefulness appears to be fully appreciated by parents and teachers alike.



#### **XIV.—CO-OPERATION OF TEACHERS.**

It is a pleasure to record my appreciation of the amount of assistance received from teachers in the schools of the County in all phases of the work of supervising the health of the children. Medical Inspections in the schools throw an added burden of work upon the teaching staff and particularly upon the head teacher, but it is entirely exceptional to find that the extra work imposed is not carried out in an entirely helpful spirit.

Co-operation from teachers is necessary in several directions, in checking lists of children due for medical inspection, in recording the names of children requiring special inspection, in making certain entries on the medical inspection schedule, in making returns of infectious disease and, very often, in assisting at the actual inspection. It is often impossible in the smaller schools to carry out a medical inspection without causing some dislocation of the ordinary school routine, although every effort is made by the medical staff to minimise such disturbance. Notwithstanding all these difficulties, teachers continue to afford every assistance possible and their help is of the greatest value in making a success of the service.

I should like to take this opportunity of thanking the teachers in the schools of the County for their continued support and to assure them of my appreciation of its value.

#### **XV.—CO-OPERATION OF SCHOOL ATTENDANCE OFFICERS.**

Close co-operation exists between the school medical and school attendance departments. Certificates are issued by medical officers on the condition of children absent from school over long periods and school attendance officers report to the medical department any cases of physical or mental defect, encountered in the course of their work.

Placing of children, who suffer from serious physical or mental defects, in special institutions is undertaken by the School Attendance Department on the recommendation of medical officers and escorts for such children are arranged for from the school nursing staff.

## **XVI.—CO-OPERATION OF VOLUNTARY BODIES.**

A considerable amount of assistance in various phases of the work of the department is afforded by Voluntary agencies. There are certain spheres where the effect of action by a Voluntary Association is more efficacious than that undertaken on an official basis. If use is made of such voluntary aid as is available it can be of great value in securing results without recourse to involved official processes.

This is exemplified in the work of the N.S.P.C.C. - Every year a great deal of help is received from this Society in dealing with neglected children. Improvement up to a point may be secured through visits from officers of the department but often a stage is reached when it has become necessary to consider some more drastic action. If this is to be undertaken officially it will involve the Authority in legal action with the possibility of accusation of bias and injustice. In these cases the work of the N.S.P.C.C. is invaluable in securing improved conditions for the children with the minimum of odium. The prestige of the Society with the public, and its unfettered position as a voluntary association give it a unique influence with the individual. It is found that a visit from an officer of the Society usually results in marked improvement except in the case of incorrigible offenders who may need to be threatened with prosecution. The Medical Officers of the department work in close co-operation with the N.S.P.C.C. in cases of child neglect and the services of a medical officer are made available to the society when certificates of unnecessary suffering or danger to health are required.

Other Voluntary agencies to which the department is indebted include the Loughborough Cripples' Guild, The Voluntary Association for Mental Welfare and the Leicester Saturday Hospital Society.

I am greatly indebted also to the staffs of the Leicester Royal Infirmary, The Loughborough General Hospital and the various Cottage Hospitals at Ashby, Lutterworth, Hinckley, Market Harborough and Melton Mowbray, for their assistance with cases of crippling defects and their efficient work under the County Scheme for operative treatment of enlarged tonsils and adenoids.



## XVII.—SUPPLY OF MILK TO ELEMENTARY SCHOOL CHILDREN

Supplies of milk are available for the use of children in attendance at elementary schools in the County and also at certain secondary schools. The milk is supplied in bottles of one third of a pint complete with disc and straw and the cost to the child is one halfpenny per bottle.

The source of supply is in every case approved by the School Medical Officer prior to a contract being made and arrangements are in force for the frequent collection of samples from each school. These samples are submitted to bacteriological examinations at the County Laboratory. If a sample is found not to conform to the standard of cleanliness fixed, the Agricultural Department, in whose hands the arrangements lie for obtaining supplies, is notified and the producer is warned that steps must be taken to secure an improvement. If after due warning no improvement takes place the contract with the defaulting producer is terminated.

During the year 412 samples of milk were collected and submitted to bacteriological examination at the County Laboratory. An analysis of the results of these examinations shows that :—

193 or 47% contained less than 30,000 organisms per c.c.

144 or 35% contained between 30,000 and 200,000 organisms per c.c.

75 or 18% contained more than 200,000 organisms per c.c.

and that :—

325 or 79% contained no B.Coli in 1/10th c.c.

20 or 5% contained B.Coli in 1/10th c.c. but not in 1/100th c.c.

42 or 10% contained B.Coli in 1/100th c.c. but not in 1/1,000th c.c.

25 or 6% contained B.Coli in 1/1,000th c.c.

Of the milk supplied to the school 74 per cent. was of Grade "A" quality. On bacteria count only this percentage was as high as 82. There has been a steady increase during the year in the amount of pasteurised milk supplied to the schools.

Arrangements were also in force during part of the year for the biological examination of samples of milk at the Institute of Animal Pathology, Cambridge. The number of samples submitted was 59 and the results obtained were in every case negative. This arrangement was terminated at the end of July.



The following returns show the amount of milk supplied to the schools during the past six years :—

	Dec. 1930	Dec. 1931	Dec. 1932	Dec. 1933	Dec. 1934	Dec. 1935
No. of schools receiving milk ....	111	163	174	179	201	201* 8†
No. of children receiving milk	8,681	7,943	6,870	6,600	18,503	13,365* 693†
No. of bottles supplied weekly	43,405	39,718	34,310	33,250	90,261	65,944* 3,032†
No. of gallons of milk weekly ..	1,808	1,655	1,430	1,385	3,761	2,747* 126†
* Elementary † Secondary						

There has been a marked decrease in the amount of milk supplied to the schools and in the number of children having milk in comparison with December, 1934. This decrease was to be expected as the reduction of the price of milk to one halfpenny per bottle in October, 1934, and the accompanying publicity afforded to the scheme created a demand for milk which was to a large extent artificial. When the novelty had worn off many children reverted to their former aversion to milk in school and a proportion of parents also lost their interest in obtaining something for the children at less than cost price. A greater appreciation amongst parents of the benefit to the health and physique of the children resulting from drinking milk in school is necessary if an increase in the amount consumed is to be hoped for and further efforts in this direction would appear to be desirable.

Milk is supplied free to children who are undernourished and whose parents are not in a position to pay for it. The following are the arrangements for this purpose :—

(1) The Head Teacher notifies the School Medical Officer of the names of children who, in his opinion, are suffering from malnutrition and who are not receiving school milk. Such notifications are made either on a special form for use by the Assistant School Medical Officers at a routine inspection or by letter, where necessary in the intervals of routine medical inspection. Such inspections of undernourished children are, therefore held

(a) at the time of the routine inspections and (b) at such times as may be convenient to the Assistant School Medical Officers consistently with their other duties.

(2) After the medical inspection, the Medical Department send to the Agricultural Department a list of undernourished children for whom milk is advised.

The Head Teachers, The School Managers and the Agricultural Department co-operate in authorising the supply of milk to these children, in certifying the number of bottles supplied, and in assessing the capacity of parents to pay for the milk in accordance with Section 83 (1) of the Education Act.

There are at present, 419 children in 62 schools having milk free of cost. All of these children have been examined by Medical Officers and certified to be suffering from malnutrition and to require milk.

### **XVIII.—HEALTH EDUCATION.**

Efforts to promote education in all matters pertaining to health have been continued throughout the year and valuable assistance has been received from the Leicestershire Insurance Committee.

Posters and leaflets have been supplied to teachers for their use in disseminating information to the school children.

A "Saturday School" for teachers and others was held at the Leicester University College on 25th May in conjunction with the Leicestershire County Teachers' Association. A paper on Biology Education was read by C. H. Sharpe, M.A., Head Master, Abbottsholme School, Derbyshire and a general discussion followed. A number of exhibits were open for inspection.

Infant Welfare exhibitions are held in various districts of the County and senior girls in attendance at certain schools are permitted to attend. The exhibitions are arranged by the Superintendent Health Visitor under the auspices of the Maternity and Child Welfare Committee. Short talks on simple health matters are given by the School Nurse in attendance and practical demonstrations are also carried out.

## XIX.—PHYSICAL TRAINING.

Report of the Organisers of Physical Education for the Year ending, 31st December, 1935.

### 1.—*General.*

For some years the Organisers have, in their annual report, laid special emphasis upon the transformation of the methods and scope of physical education, which received official confirmation in the new syllabus issued by the Board of Education a little over two years ago. That the change in the treatment of this important subject is still far from being universally recognised is shown by the press references to the Circular on Physical Training which has just been issued by the Board. One of the more dignified dailies referred to “physical drill,” while a rather more flamboyant journal had the headline “Sergeant-Majors in Every Town.” The Syllabus still includes, it is true, certain formal exercises designed for the correction and development of particular parts of the body which might be described as “drill,” but these now occupy only a minor part in the Physical Training lesson, which is directed to the production of an alert and responsive mind, and a supple and well poised body.

Although misconceptions of the status and intent of Physical Education still persist, the past year has seen an almost dramatic awakening of public interest. Formerly all real impetus had come from specialists in the subject, with little support from the general public and persons concerned with other branches of education. Recently, however, the subject has been given much space in the press, both general and educational, Members of Parliament have recognised it as a means of improving the physical condition of the nation, while Inspectors of general subjects and Directors of Education have advocated a daily period of physical activity for all school children.

The manner in which the teachers of the County have brought both the letter and the spirit of the new Syllabus into the school curriculum is deserving of the highest praise. Their eager response to the Committee’s offer of teachers’ classes on the Syllabus was referred to in the last report. The effect of those classes is now apparent in the schools, even in adverse conditions in many places, and in spite of deficiencies of equipment. The most serious disadvantages are the lack of halls or rooms large enough for physical



exercises in bad weather and playgrounds cramped in size or unsuitable in surface. Reference to these matters is made later in this report.

## 2.—*Allocation of Time.*

The “daily period” has been the ideal of the Organisers for some years past ; they feel that it is at last nearing realisation. It is suggested that the length of the period be varied according to the age of the child as follows :—

- (a) For children of 4 to 7 years, 15 minutes every morning for actual physical exercises, with a further 15 minutes on at least three afternoons in the week for simple games and rhythmic work.
- (b) For juniors from 8 to 11 years, a daily period of 20 minutes for physical exercises, taken preferably in the mornings, with the addition of one 30 minutes period for team games during an afternoon session.
- (c) For senior scholars, a daily period varied in length from 30 to 40 minutes, to fit most conveniently into the timetable, with one afternoon period of not less than 40 minutes for such major games as hockey and football in the winter, and cricket and ling rounders in the summer.

## 3.—*Senior Boys' Schools.*

The interest and enthusiasm of teachers in the Modern and Senior Schools has been maintained. In the Modern Schools a degree of specialisation by teachers with qualifications and aptitude in the subject has made possible the introduction of an advanced scheme of gymnastics involving the use of portable apparatus. As a result of the wider interest that has been aroused, and of the fact that, in the majority of cases, central halls are available, systematic training is now possible.

The work in the Senior Schools is, however, somewhat restricted, since the lesson is dependent upon weather conditions. During the winter months the work has to be modified and in many cases the lessons are omitted altogether. If the pupils are to derive the greatest benefit from physical education, it is essential that there should be continuity of training. Under existing conditions this is impossible. Each school should have a room of adequate size, *e.g.* 60 feet by 30 feet wide, properly ventilated, and with a clean floor in good repair, on which the pupils can sit or lie for certain

of the exercises. In the present buildings such rooms do not exist, but the Organisers express the hope that, when structural alterations are being made, a suitable room will be provided so that the pupils may receive a training similar to that of their more fortunate fellows in the Modern Schools. The common practice of polishing the floor of the Assembly Hall is to be deprecated.

The last year has seen the beginning of a progressive policy of the Committee. A modern gymnasium, with changing rooms fitted with shower baths, is being erected at the Melton Mowbray Modern School for Boys, and will prove of incalculable value.

#### 4.—*Senior Girls' Schools.*

A Syllabus for Senior Schools, to replace the obsolete Syllabus of 1919, and the Supplement for Older Girls, has not yet been published by the Board of Education. For the present therefore, the work for girls over 11 years of age is more or less a compromise between the known and the unknown. For the last two years the work in Senior Schools has been based on the more advanced tables from the Junior Syllabus of 1933, with the addition of simple apparatus work suggested by Organisers. This experimental period has proved useful in many ways. In the first place, for example, it has convinced the Organisers that the inclusion of apparatus work for older girls is effective in maintaining their interest, which is inclined to wane as they approach adolescence. In the second place, it has become clear that the subject requires natural aptitude and special training for its successful treatment, and that it should be entrusted only to qualified specialist teachers. The introduction of even simple apparatus work involves an element of danger unless the teacher receives careful guidance in the correct methods of supporting children during the performance of vaults and jumps. Every girl in the class is encouraged to attempt the exercises, and some are found to be more in need of assistance than others ; this assistance can only be wisely regulated and adequately given if the teacher has attended a definite course of instruction in apparatus work. It has been found, too, that, whilst it is not impossible to teach apparatus work without actual demonstration, it is infinitely easier and more effective if the teacher can show the movement as well as describe it verbally.

#### 5.—*Junior Schools.*

It is in the Junior School that the 1933 Syllabus has called for the greatest effort. In many respects the work now laid down for



children of 10 to 11 years of age is in advance of the requirements of any previous Syllabus for children of 14.

The Organisers were, in fact, in some doubt whether the teachers would be able, even after a course of instruction, to deal with the new tables of exercises. It is with great satisfaction that they are able to report that the teachers, encouraged in their efforts by the interest and enthusiasm shown by the children, have worked with keenness and patience, and that consequently, steady progress is being made in the Junior Schools.

In some cases, the teachers are still tentative in their treatment of the "group work" suggested at the end of each lesson. This part of the lesson, in which sections of the class work under the guidance of their own leaders, with supervision by the teacher, is one of the most valuable features of the modern lesson. The advantages of group organisation are obvious. The groups are small and the amount of practice each child can obtain is greatly increased ; the responsibility placed upon each group to proceed on their own accord without disturbing others is excellent training in individual control and public-spirited behaviour ; and friendly rivalry between both individuals and groups improves the standard of performance.

The teachers are given a most interesting variety of exercises from which to make a selection suitable for their particular playground conditions, and it is hoped that they will make much greater efforts to develop this section of the Physical Training lesson.

#### 6.—*Infant Schools.*

The advantages of the new type of Physical Training are most clearly apparent in the Infant Schools. The fundamental agility movements and simple games are grasped with ease and performed with zest by even the youngest pupils. In almost every Infant School, lessons are conducted in the happy and informal manner suited to children in the early years of school life, and the standard of work is uniformly good throughout the County. The Infant School teachers are to be congratulated upon the improvement which has been made in so short a time both in the performance of the children and in their enjoyment of the lessons.

#### 7.—*Rural Schools.*

A review of the year's endeavour shows without doubt that more attention is being devoted to the physical well-being of the rural



child. In spite of the handicap of having to teach children of varying ages in the same class and often in small rough-surfaced playgrounds, the lessons have developed into "worth-while" training.

Following the introduction of the 1933 Syllabus, and the acquirement by most schools of ropes, balls, hoops, jumping canes, etc., the increased keenness and enjoyment of the children is often most striking and reflects the careful planning and preparation of the work by the teachers. Increased activity, mental as well as physical, is noticeable, and whereas, in the past, movements were slow and often ungainly, the children are now experiencing the joy, not only of free movement, but of quick movement.

The teachers are realising the value of dividing the class into groups or teams to afford opportunities for activities suitable to the age and ability of the children. The older children practise by themselves, or under the charge of one of their number, thus relieving the teacher to deal with the younger section. Moreover, the older children, through the duties of team leaders, such as care of apparatus, and marking of pitches, are given a greater chance of developing initiative, resource, and a sense of responsibility.

During winter months when work outside is impossible, the lesson is modified and taken in the classroom. Such a lesson forms a poor substitute for a period of activity out-of-doors, but it is pleasing to note that in those schools where re-organisation has taken place, the room vacated by the older children is used for exercise and activities.

The practice of changing into soft shoes or plimsoles is gradually being established, and the pupils are being encouraged to discard surplus clothing to ensure greater freedom of movement and, ultimately, greater cleanliness. Progress in this direction must necessarily be slow, but the spirit in which the problem is being faced is worthy of praise and gives much encouragement for the future.

#### 8.—*School Playgrounds.*

The energetic character of the present day Physical Training lesson, with its group work, free activities and ball training, make the playground requirements very different from those of the past. The pupils are no longer drawn up in four straight lines "doing

drill," but need unstinted space and a hard level surface on which to run, skip and jump and to test their powers of skill and endurance without fear of collision and interference.

All this is familiar to those who are directly concerned with the conduct of Physical Training in the Schools. The importance of this consideration has, however, not been fully appreciated by architects until recently, and the playgrounds of some schools which have been built only a few years are restricted and unsuitably planned ; a site which could have provided satisfactory space has often been laid out in such a way as not to secure its full advantage. The prime requirement is the largest available area of unbroken ground, as nearly as possible square or rectangular in shape. Narrow strips, some 20 feet to 30 feet in width, along the sides of the school buildings, are unsuitable. They increase difficulties of supervision ; they do not provide the necessary space for a really active lesson ; and balls frequently go over walls or find their way into adjacent school gardens or surrounding shrubbery. There should be a sufficient area of hard surface, preferably not less than 100 feet by 75 feet, to accommodate at least 35 to 45 pupils ; in mixed or large schools it will be necessary to provide for more than one group at a time.

In some schools the playground is divided into separate sections for boys and girls by a fence or wall. H.M. Inspector has approved the removal of this partition in rural and junior schools if an adequate space for Physical Training may thereby be secured.

The playground should be, if possible, away from classroom windows, as the unavoidable noise of active children cannot but disturb the concentration of the pupils inside school. The Physical Training lesson naturally suffers by being confined to one particular end of the ground in order to avoid interference with class work, hence some of the more active practices have to be omitted. It is essential that playgrounds should have fences through which balls cannot roll, and wire-netting should be fixed above walls bordering streets and adjacent gardens. Windows overlooking playgrounds should also have wire protection. With such provision, play and activities can be taken with greater freedom and enjoyment and with better results.

Apart from the question of area, there remains the consideration of surface. Many of the playgrounds in the County have poor surfaces which are unfit for use for some time after rain, and which are dusty



in the summer. Others are rendered dangerous by projecting stones or by severe slopes. It is recommended that the Committee urge Managers of schools to provide a suitable hard and level surface and give them all possible assistance in doing so. Where the playgrounds are cramped in size, the Managers may be able to secure the use of a neighbouring field for use in good weather.

#### 9.—*Apparatus.*

In their last report the Organisers stated that “many of the benefits and much of the enjoyment of the new Syllabus will be lost if the necessary, though simple, apparatus is not provided.” It has been encouraging to find that nearly all teachers are in agreement with this statement and that in almost all schools strenuous efforts have been made to provide the necessary equipment. The task of finding, from local sources, 50% of the cost of all apparatus has made great demands upon the teachers’ time and purse.

The Organisers learn with great satisfaction that the Committee have included £500 in their estimates for the coming year for the supply of apparatus for the Physical Training lesson, and that in future the schools will be required to find 50% of the cost of games equipment only.

#### 10.—*Suitable Clothing.*

The Organisers have come to the conclusion that the wearing of suitable clothing for the Physical Training lesson depends less upon the conditions of employment in any particular locality or the financial circumstances of the parent, than upon the personal influence of the class teacher supported by the interest of the Head.

It is generally accepted that the ordinary school dress of either girl or boy is entirely unsuitable for a Physical Training lesson conducted on modern lines. It is therefore most regrettable to find in many schools, perhaps even more in boys’ departments than in girls’, that the children are not changing into a costume suitable for this lesson. It is not enough to put on a pair of rubber shoes ; some light uniform which allows complete freedom of movement and lets air reach the surface of the body, is essential both for safety and for hygiene. Such a uniform can be obtained most inexpensively ; since shorts and singlet can be bought for 10½d. each, any child can possess, at a cost of 1/9, a practicable, if not an ideal, outfit.

Accommodation for changing is almost non-existent except in the most recent school buildings, but here again the Organisers find



that where the Head and assistant teachers are keen enough, the changing is done either in classroom or cloakroom, and that little is made of the inconvenience of such an arrangement.

#### 11.—*Teachers' Classes.*

Since September last County teachers have been invited by the Governors of Leicester University College to participate in the course of Physical Training provided for post graduate students. Separate courses for men and women, lasting throughout the year, are conducted for teachers who specialise in Physical Training in Central Schools.

The work is based upon the most recent publications on Physical Training, with the addition of definite training in the teaching of apparatus work and of field and playground games.

It is hoped that, after this long and strenuous preparation, the teachers will have greater confidence in their ability to develop apparatus work in their schools on perfectly safe and sound lines.

#### 12.—*Swimming.*

Swimming has now become a recognised and well established school activity, and would undoubtedly develop even more but for the lack of Baths. Arrangements for schools to attend the Swimming Baths for instruction were made on similar lines to those of previous years.

One hundred and thirty classes of boys and girls from 44 schools attended 8 Baths ; two new classes were admitted during the season.

<i>Swimming Baths</i>	No. of Classes.		Total No. of Attendances.	
	<i>Boys.</i>	<i>Girls.</i>	<i>Boys.</i>	<i>Girls.</i>
Oadby ....	8	10	1,939	2,294
Hinckley ....	12	12	4,990	4,365
Coalville ....	16	16	5,355	5,482
Loughborough ....	4	4	1,504	1,279
Leicester ....	7	4	3,556	2,032
Market Harborough....	7	8	2,575	2,706
Ashby-de-la-Zouch ....	2	0	522	—
Melton Mowbray ....	10	10	1,266	1,742
	—	—	—	—
	66	64	21,707	19,900
	—	—	—	—

Total No. of Classes	....	....	....	=	130
„ „ „ Attendances	....	....	....	=	41,607
Total No. of boys who attended Baths	....			=	1,669
„ „ „ girls „ „ „	....			=	1,531

The attendance at the Baths has been excellent throughout the season. The following is a summary of attendances for each of the last six years :—

1930	....	22,524
1931	....	24,243
1932	....	32,027
1933	....	42,318
1934	....	32,385 (part season)
1935	....	41,607

The Swimming tests now form a definite part of the Scheme, and have been the means of raising the standard of swimming.

Life Saving Methods are being taught to all classes. The following awards of the Royal Life Saving Society were gained :—

	Boys.	Girls.
Bronze Medallion	13	0
Intermediate Certificate	26	15
Elementary Certificate	23	22

An experimental class for boys who had gained the Committee's Swimming Certificate and had left school was held during the summer months at the Coalville Baths. The class had as its immediate objective the awards of the Royal Life Saving Society. The class was formed under the County Scheme of Evening Institutes, and 12 members were enrolled. In addition to Life Saving, attention was given to good form in swimming, diving, and speed, and to coaching in water-polo. The members of the class showed their appreciation by their regular attendance, and at the conclusion of the course 11 members gained the Bronze Medallion Award. The teacher in charge is to be congratulated on the excellent methods adopted, and thanks are due to the Coalville Baths Committee for the use of the Baths, and to the Baths Superintendent for his valuable help and advice.

In view of the satisfactory result of this class, it is proposed to form next year similar classes at the Baths throughout the County.

### 13.—*Evening Institutes.*

Twenty classes in Physical Education have been organised in the Evening Institutes throughout the County. The class teachers are to be congratulated upon the spirit shown by the students and the standard of work attained. The provision of portable apparatus at each centre has been welcomed by teacher and student and has been the means, not only of stimulating interest, but of providing the opportunity for a broader and more advanced scheme of Physical Education. The classes are well attended.

### 14.—*Voluntary Associations.*

The ever increasing work undertaken by the teachers during out-of-school hours has included the organisation of inter-house, inter-school and inter-area contests in football, cricket, athletics and swimming. A team of boys and girls, representative of the County, entered for the National Championship Athletic Competition held at Kettering in July.

### 15.—*Summary of Recommendations.*

It is recommended :—

- (i) That the Committee reconsider their regulations and increase the allocation of school time to Physical Education, in order that the pupils may have some form of physical activity on each school day. (Para. 2).
- (ii) That, where structural alterations are to be made in existing Senior Schools, provision be made for a room with sufficient floor space for exercises and activities. (Para. 3).
- (iii) That consideration be given to the planning of playgrounds in all new schools, in order that there shall be available a sufficient area of unbroken ground for the carrying out of the training. (Para. 8).
- (iv) That Managers be afforded encouragement and assistance to improve the surface and size of existing playgrounds. (Para. 8).
- (v) That every encouragement be given to the increasing practice of changing into suitable clothing for the Physical Training lesson, and that the attention of teachers and parents be drawn to the advantage of rubber-soled shoes. (Para. 10).

D. D. COWAN.

D. MILLER.

*Organisers of Physical Education.*



**XX.—BLIND, DEAF, DEFECTIVE AND EPILEPTIC CHILDREN.***(1) Physically Defective Children.*

Records of all physically defective children are kept at the Central office at Leicester. Children suffering from severe physical defect of such a nature as to interfere with their ordinary activities at school are subjected to special examination and a detailed report of their physical condition is made. The register is kept up-to-date by the addition of fresh cases and by the re-examination at intervals of all children whose names are already on the register. These examinations frequently involve special visits by Medical Officers to the homes of the children and each year a certain amount of time is allotted to the Medical Officers for this purpose. The central register now contains a fairly complete return of all physically defective children in the County and knowledge is available as to the progress or retrogression of each child.

The cases are classified as follows :—

	Males	Females.	Total.
Blind or Partially Blind ....	13	11	24
Deaf or Partially Deaf ....	8	6	14
Anterior Poliomyelitis ....	46	30	76
Spastic Paraplegia ....	15	8	23
Congenital Deformities ....	12	13	25
Torticollis ....	3	—	3
Rickets ....	7	1	8
Scoliosis ....	4	7	11
Osteomyelitis ....	3	—	3
Muscular Dystrophy ....	6	1	7
Heart Disease ....	10	32	42
Talipes ....	18	7	25
Birth Palsy ....	8	5	13
Injuries ....	9	3	12
Miscellaneous ....	15	14	29
TOTALS	177	138	315

*(2) Tuberculosis.*

All notifications of Tuberculosis amongst children by School Medical Officers, Tuberculosis Medical Officers and General Practitioners are recorded on a card index system at the central office.

During the course of their routine school work the Assistant School Medical Officers examine contacts of Tuberculosis cases and in 1935 the number of such examinations made was 40.

The register of Tuberculous children is kept up-to-date by the addition of new cases notified and from details taken from the reports of school nurses as a result of their periodic visits to the homes of the children.

### (3) *Mentally Defective Children.*

#### (a) *Ascertainment.*

Each year a certain proportion of the time of Medical Officers is allotted to the examination and re-examination of mentally defective children. The names of children said to be defective are received from School Teachers, Nurses and from the Organisers of Special Classes and these children are referred to the Medical Officers for special examinations.

A register of all mentally defective children is kept at the central office and all reports, correspondence, etc., relevant to the case of each child are filed with the child's dossier. The re-examinations of these children take up a considerable time and it is not possible to re-examine them as often as could be wished but the register and dossiers of the children comprise a fairly complete record of all mentally defective children in the area.

#### (b) *Provision for the Mentally Retarded.*

Definite progress was made during the year in providing for the educational needs of mentally retarded children. A second organiser was appointed and steps were taken to establish special classes for mentally retarded children in several of the central schools. It was decided that the original organiser, Miss Turner, should continue to visit the Junior Schools and supervise the progress of retarded children in these schools whilst the new organiser Mrs. Gough, should proceed with the necessary measures for the establishment of special classes for older children in the Central Schools.

Several classes have already been commenced and are operating successfully. A syllabus of instruction has been formulated and a special record card for each child has been prepared. This card will embody a complete educational history of the child including his response to educational tests. It will also contain a record of his mental ratio, of his physical condition, completed by a Medical Officer, and his progress in response to special instruction.

It has not been necessary to appoint special teachers for these classes. In each school a member of the staff has been sufficiently interested in the work to take charge of the special class, under the general supervision of the organiser. As the work increases it will be necessary to appoint special teachers for these classes and it is expected that a few such appointments will be made early next year.

The whole scheme is as yet in its infancy but even at this early stage it shows promise of great usefulness. When the preliminary obstacles and difficulties have been surmounted and the scheme is firmly established it will fill an important place in the educational system by developing the potential capacity of the retarded child to its fullest extent.

*(c) Provision for the Mentally Defective.*

Mentally Defective children, *viz.* those diagnosed as Feeble Minded (ineducable), Imbeciles or Idiots are notified to the Mental Deficiency Act Committee who undertake responsibility for their future care.

Provision is made for the care of Mental Defectives at Stretton Hall, near Leicester. This institution which is administered by the Mental Deficiency Act Committee has accommodation for twenty cot and chair cases and for thirty children of medium and high grade.

*(d) The work of the Voluntary Association for Mental Welfare.*

The following is the report of the secretary of this Association on the work done during the year :—

Twenty-five children between the ages of 7 and 16 were referred to the Voluntary Association during 1935. Of these, two have been admitted to Residential Special Schools; two came before the Juvenile Courts and were subsequently certified under the M.D. Acts; two more were awaiting certification at the end of the year; four joined Occupation Centres; two expected to be employed in farm work on leaving school; and two were still attending school (one of whom was put on probation for cruelty to a cat).

Eleven of the new cases were placed under statutory supervision, having been diagnosed as “ineducable” by the School Medical Officers and notified to the M.D. Act Committee. One subsequently removed from the County.



In January 1935, one boy (14) was excluded from a Residential Special School and joined an Occupation Centre. Another (14), previously committed to an Approved School, was awaiting admission to Rampton State Institution at the end of the year.

The Voluntary Association assisted in securing Residential Special School vacancies and provided an escort for two admissions and other children returning home on holiday.

The East London Child Guidance Clinic asked the Association to undertake friendly supervision of a "borderline" lad of 15, who had been placed on a farm in the County, but the lad absconded after a few weeks and returned to London.

The 4 Occupation Centres, at Coalville, Hinckley, Loughborough, and Melton Mowbray continue to make good progress. At one Centre the girls' attendance prize was won by a child who had made 100% attendances in 1935.

Through the courtesy of the School Medical Department, medical inspections were again held at all the Centres.

An Organiser from the Central Association for Mental Welfare visited the Centres in the autumn and the Staff were greatly helped and encouraged by her friendly criticisms and suggestions. The reports of the Organiser were very satisfactory and comment was made on the happy atmosphere at the Centres.

Once more we would like to record our thanks to the County Council and the Local Education Authorities for their co-operation.

## **XXI.—SECONDARY SCHOOLS.**

### *(1) Medical Inspection.*

There are fourteen secondary schools in the administrative County, seven of which are maintained by the Authority the remaining seven being non-provided but aided.

The approximate number of children on the rolls of the provided schools is 1,464 and in the aided schools 1,994, a total of 3,458.

Each secondary school is visited by a Medical Officer at least once a year for the purpose of carrying out routine and special examinations. The work at the girls' schools is undertaken by a lady Medical Officer.

Routine medical inspections of children are made on their admission and at the ages of 12 and 15 years. Special children referred to the doctor by the teacher or parent are also examined at the time of the Medical Officer's visit.

Re-inspections of children discovered at the previous inspection to be suffering from defect or disease are also carried out and this is the only method employed of following these children up to ascertain whether or not treatment has been obtained.

The routine inspection numbered 1,487. As a result of these inspections it was found that 264 or 17.7 per cent required treatment.

The most prevalent defect was found to be defective vision and 140 cases were referred for treatment and 89 for observation.

(2) *Medical Treatment.*

No treatment is provided under arrangements made by the Local Authority. All defective children requiring treatment are advised, through their parents, to consult their own doctor.

## **XXII.—EMPLOYMENT OF CHILDREN AND YOUNG PERSONS.**

The employment of children in the County is regulated by bye-laws. Employment is not permitted before schools hours except for the delivery of milk and newspapers and a certain class of domestic work.

The engagement of young persons in street trading is also controlled by these bye-laws which have the general effect of ensuring that employment has no deleterious effect on the children's fitness to receive education.

Every child making application for an employment certificate is required to pass a medical examination by one of the School Medical Officers.

During the year 303 certificates were granted :—

Errands	....	....	....	....	....	76
Delivery of Newspapers	....	....	....	....	....	211
Delivery of Milk	....	..	....	....	....	14
Other permitted duties	....	....	....	....	....	2

### XXIII.—HYGIENIC CONDITIONS OF ELEMENTARY SCHOOLS.

During 1935 each elementary school was inspected at least once by an Assistant School Medical Officer and particulars with regard to the hygienic conditions entered on a special form. Thus a complete survey has been made as in previous years.

Each report is examined shortly after the inspection and defects or inadequacies referred to the Buildings and Sites Department. The particulars obtained on the forms are as follows :—

- (1) The average attendances of Boys, Girls and Infants. This information is necessary in order to determine the adequacy of the closet accommodation.
- (2) The surroundings—whether Urban or Rural, open or built-up.
- (3) Heating—the type and adequacy.
- (4) Ventilation—any special arrangements or defects are noted.
- (5) Lighting—classified as :—
  - (a) Natural—whether the windows are suitably placed and whether the light passing through them is adequate.
  - (b) Artificial—The type and whether satisfactory or not.
- (6) The Water Supply—Information is required under two heads—
  - (a) Potable—how obtained and whether the supply is adequate.
  - (b) Washing—In addition to the source and adequacy, it is noted whether wash basins or other facilities for washing are provided.
- (7) Sanitary Conveniences—The type of closet, and the number provided for the boys, girls, infants and staff is noted, also whether or not a urinal is provided for the boys.  
The cleanliness and condition of repair of these offices also require to be noted as well as the frequency of emptying or flushing according to the type of closet provided.
- (8) Cloakroom Accommodation—Whether adequate, also if there is any form of heating or facilities for drying clothes and boots.



- (9) Condition of the playground—The type and repair of the surface and whether the size is sufficient for the number of children attending the school.
- (10) The general cleanliness and condition of repair of school-rooms and cloakrooms.
- (11) The type of desks and whether they are suitable for the children attending the various classes.
- (12) Whether or not the blackboards are satisfactory.
- (13) General Remarks—The Medical Officer is requested to note any condition not present which would benefit the children's health, or any conditions that are likely to be prejudicial to the health of the children.

In 1935 the number of schools coming under the control of the County Education Committee was reduced owing to the fact that the boundary of the City of Leicester was extended on April 1st.

In a County of the varied nature of Leicestershire uniformity in the type of school and in the sanitary provisions that are made is not expected. Thus the schools in rural areas, where there is a stationary or declining population, have been built for a considerable time, are small, and have been modified from time to time in order to modernise them in so far as possible. These schools are mostly being used only for younger children.

In Urban industrial areas on the other hand both old and modern schools occur. The older schools have been in some instances brought up-to-date, but in other it is not possible to modernise them to the extent desirable owing to the proximity of adjacent buildings.

Nearly all the schools in Urban districts have taken advantage of a main water supply and sewerage facilities.

Senior scholars are transferred daily from various parts of the County to Central Schools. A number of these schools have been recently built, while others are older schools which have been considerably modified structurally and brought up-to-date.

As was pointed out in last year's report, it is very important for a school to have satisfactory hygienic arrangements particularly now that hygiene is being taught to an increasing extent. Such a school is a concrete example to the children and they will all the

more appreciate the teacher's remarks. In a school where there are inadequate washing facilities, or in which the classrooms are poorly lighted and cannot be ventilated without draughts, the teacher's task is rendered more difficult and the value of a lesson on cleanliness or fresh air and sunlight is to a great extent lost.

Defects and improvements are noted below under their appropriate headings.

### *Heating.*

Several types of heating are used in the schools. Where central heating is installed this is found to be the most satisfactory method providing that the plant is modern, properly looked after and designed for the premises with due regard to the need for ventilation.

Stoves do not occur so commonly, nor are they so satisfactory owing to the fact that they dry the air in the classroom and the flues are liable to leak.

Open fires are mainly found in the older schools and the grates being usually of the older type are not very efficient. Where possible open fires are being replaced by central heating or stoves.

Three schools have electric radiators and one has electric thermostatic tubes supplementing the main source of heat. In all cases this form of heating has been found satisfactory.

Complaints with regard to the inadequacy of the heating were reported on in six schools. In two of them heating is by means of stoves and the complaint referred to one room only in each case. In the remaining four heating is by means of open fires.

In one school a stove was reported to be in bad repair but this defect has been remedied since.

### *Ventilation.*

Artificial methods of ventilation are not used in any of the schools in the County. The windows are relied upon for satisfactory ventilation though most classrooms have roof ventilators.

In six schools the ventilation was inadequate owing to the fact that in three instances there were not sufficient windows made to open and in one that the roof ventilators was out of repair.

*Lighting.*

The natural lighting is, in most schools, satisfactory. In two schools it is inadequate where there is not sufficient window area.

Artificial lighting is obtained by three methods, electric light, gas and oil lamps. Electric light is the most satisfactory method and the schools that rely on oil lamps are changing over to electric light where this is rendered possible by the spread of the electric grid system.

Gas is used in some schools, but this method is not very satisfactory and is reported on in two schools as being definitely inadequate. Gas is also replaced by electric light wherever possible.

In the small country schools which close early, artificial lighting is not necessary and there is either no illuminant or oil lamps.

The infants' department in one school is somewhat shaded by trees which cut out a good deal of light. Lopping has been suggested in order to remedy this defect.

*Water Supply.*

An adequate supply of pure drinking water is desirable in every school and where a main supply is available it should be utilised, though there are a few schools which have not taken advantage of this. In several villages where water schemes are under consideration the schools will benefit in due course.

Schools which have no local main supply available obtain their potable water from the village pump or a neighbouring well. The water is usually carried to the school by the caretaker each morning and kept on the premises in covered pails.

There are a few schools which do not provide any potable water for the children and this is most unsatisfactory.

A number of schools, particularly the new ones, provide a drinking fountain for the children which is more satisfactory than mugs.

Water for washing is more easily obtained and is usually in the form of rain water from the roof stored in tanks. While quite satisfactory, there is sometimes a shortage in time of drought.



It is important that adequate wash basins be provided for the children, but this is not always the case. In four schools the provision was grossly inadequate. Other schools on the contrary are very well equipped and some have wash basins with running water, both hot and cold, laid on.

An adequate supply of potable washing water is necessary in those schools where the children remain for lunch.

### *Sanitary Conveniences.*

In most of the schools in Urban districts the water carriage system is used, though in some schools where a public water supply and system of sewerage are available these facilities are not taken advantage of, the pail system being still in use. Water closets are provided in some of the rural schools and where the water supply is insufficient for automatic flushing they are hand-flushed daily by the caretaker.

Where water closets are not practicable pail closets are in use and are satisfactory providing they are attended to regularly. Responsibility for emptying the pails is usually undertaken by the District or Parish Council scavenging scheme. Where no scheme is available the emptying is done by the caretaker or by private contract. Very often, however, there is considerable difficulty in arranging for the regular emptying of pails. During 1935 there were four complaints of infrequent emptying.

The pit or privy midden type of convenience is still in use in several schools ; they are difficult to empty and the process is carried out about once a year or when necessary. It is desirable that where possible pails or water closets should replace this type of convenience. In a few schools both pails and pits occur and in such cases it is desirable that the pits be done away with and pails substituted.

Inadequacy of accommodation is complained of in two schools, and in several others that the conveniences are not suitable to the use of the infants.

It is reported that in four schools the sanitary conveniences are only a few feet from the classrooms.

*Cloakroom Accommodation.*

In the newer and central schools it is satisfactory to note that adequate facilities are provided for the drying of boots and clothing.

Reports were received during 1935 that in five schools the accommodation was inadequate and that in eight it was poor.

Several factors are taken into consideration when inspecting cloakroom accommodation. The room space should be sufficient for the number of racks and pegs provided, so as to allow an unobstructed passage of air between the various sets of clothing. The number of pegs provided should be relative to the number of children attending the school.

*Playgrounds.*

With regard to size, most of the playgrounds are satisfactory and in rural schools the children usually have the use of a neighbouring field.

Two schools are without a playground and the children attending one of these play in the road which is most undesirable.

Asphalt is the most satisfactory surface for a playground and it is satisfactory to note that this type of surface is provided in most of the schools.

The playgrounds in a number of rural schools have a loose gravel surface which is unsatisfactory for several reasons. When the gravel has disappeared, as it has in some cases, it leaves an earthen surface which becomes muddy in wet weather, resulting in the children bringing mud into the school on their boots and dusty in dry weather. A gravel surface causes frequent falls and skin abrasions during play and hampers movement during physical training. Also it is not possible to have outdoor physical training in wet weather so frequently as when the surface is asphalted.

In those cases where the playground is inadequate in size, or where no playing fields are available, the great disadvantage is that a number of children remain in the school during play hours and so instead of the classrooms being thoroughly ventilated the air remains vitiated.

*Desks.*

It is most important that suitable desks be provided for school children, as otherwise postural defects are often induced.

There are forty schools in which the desks are wholly or partially inadequate. In several cases they are backless, some of these being of the old long form type, in other instances they are unsuitable in size for the children attending.

The unsatisfactory desks are gradually being replaced by the modern type.

*Blackboards.*

There was only one school in which a defective blackboard was reported. This is very satisfactory as blackboards with a reflecting surface are not only difficult to read in parts of the classroom but cause eyestrain.

*General Repair.*

During 1935 there were only five reports of structural disrepair, and one where the outside of the school needed re-decorating. No report of general uncleanness was received.

Under General Remarks extra precautions against fire were suggested in one school and under the same heading attention was drawn to two leaky roofs, one worn floor, one case of defective woodwork in the windows and one of badly cracked walls.

*Summary of Repairs and Improvements carried out during 1935.*

Heating improvements	....	....	....	9
Installation of Electric Lighting	....	....	....	8
Connection to Public Water Supply			....	1
Playgrounds repaired	....	....	....	7
General re-conditioning	....	....	....	4

The co-operation of the teachers and the members of the Education Committee's staff, together with that of the Buildings and Sites Department, has resulted in a more complete hygienic supervision of the Public Elementary Schools of the County during 1935 than hitherto.



**FIFTY-NINE CASES OF MONOCULAR BLINDNESS.**

By DR. CONSTANCE WALTERS, *School Oculist*.

For the purposes of the Education Act a blind child is one who is "too blind to be able to read the ordinary schools books used by children." This definition will include all those children in whom the vision in both eyes is 6/36 or less.

In addition to such cases of blindness there is an appreciable number in whom the defective vision affects only one eye and of whom no special record is kept. I have found fifty-nine of these cases among the school children I have examined during the last two years.

In this article I propose to describe and classify these cases according to the condition which caused the loss of sight.

I have excluded from the series all cases of amblyopia ex anopsia whether from squint or inequality of refractive error between the two eyes. With the recent methods of treatment of such amblyopic eyes there is an increasing hope that some improvement in vision is possible throughout the school age period. I have, therefore, confined myself in this series to cases of pathological and developmental origin, where the defective sight may be regarded as permanent.

On the other hand a concomitant strabismus was observed in 18 out of the 59 children under consideration. Here the strabismus was in all cases secondary to the loss of sight and was in no cases responsible for it. Of these 18 squints, 7 were external and 11 internal in type. It is interesting to note that 5 of the external squints occurred in hypermetropic and 2 in myopic eyes. On the other hand, 9 of the 11 internal squints were associated with hypermetropia and one with mixed astigmatism while the eleventh had a coloboma of the iris and chorioid and a spherical myopic correction of minus 7 dioptries. This eye had an internal concomitant strabismus of 15° range.

I think that the unusual association of hypermetropia with an external, and myopia with an internal, squint, would tend to support the conclusion that the squints are of secondary origin, independent of the refractive error and due solely to the absence of clear vision and power of fixation in the affected eye.

The present series of 59 children with monocular “blindness” has been collected from the total number of children at present on the school registers who have been referred for examination for defective vision. Apart from the cases of amblyopia which I have excluded from the list, there is a possibility that a certain number of abnormal fundus conditions may remain unrecognised in children who have not yet learnt to read. Apart from these exceptions the list is therefore complete.

Five of the children included in the present series were newly admitted to school, and their vision could therefore not be recorded in terms of Snellen’s types. Three of these children were referred to me for an abnormality which could be recognised externally. The other two shewed secondary squints and the causative lesion was only discovered by examination of the fundus.

One girl of 14 with a high degree of myopia in both eyes was mentally deficient and could not read. By her ability to recognise objects at varying distances it was estimated that one eye with extensive atrophic changes in the chorioid was practically sightless. With a corrected focus the vision in the other eye corresponded roughly to 6/18.

In the remaining 53 cases, 12 had vision 6/36, 9 had vision 6/60 and in 32 there was inability to read even the letter corresponding to 6/60.

I now propose to classify broadly the 59 cases of monocular blindness under review, according to the causes responsible for the conditions found. For the purposes of the classification I shall adopt the main headings used by the Board of Education in their form 37D., namely congenital, infectious and traumatic causes. The figures are as follows :—

A.—*Congenital and undetermined causes.*

(i)	Myopia with associated degenerative changes of the chorioid	....	....	9
(ii)	Congenital cataracts	....	....	8
(iii)	Coloboma of iris and chorioid		....	3
(iv)	Persistent hyaloid artery	....	....	1
(v)	Buphthalmos	....	....	1
				—
				22
				—

B.—*Infectious and bacterial causes.*

(i)	Ophthalmia neonatorum	....	....	6
(ii)	Corneal opacities following keratitis and corneal ulcers	....	....	13
(iii)	Irido cyclitis	....	....	2
(iv)	Anterior chorioiditis	....	....	1
				—
				22
				—

C.—*Traumatic causes.*

(i)	Birth injury	....	....	3
(ii)	Penetrating wounds of the eyeball	....		4
(iii)	Corneal wounds	....	....	3
(iv)	Blows on head	....	....	4
(v)	Burns of head and neck	....	....	1
				—
				15
				—

In this table such terms as coloboma, persistent hyaloid artery and buphthalmos describe the conditions they designate but the cases in the other groups require some further description.

Group A (i).—In the 9 cases of chorioidal degeneration resulting from extreme degrees of myopia the question of an associated amblyopia must be considered, especially as in 6 of the children there was a difference of over 10 dioptries of myopic error between the two eyes. By comparison with similar cases which did not shew such marked fundus changes I concluded that the chorioidal atrophy must be largely responsible for the gross loss of vision observed. The actual myopic correction required varied between 10 and 20 dioptries.

The myopia was bilateral in 4 of these 9 cases, in 3 the other eye shewed hypermetropia and one mixed astigmatism.

Group A (ii).—One of the 8 cases of congenital cataracts was posterior polar, the other 7 being zonular in type. Fuch states that “zonular cataract almost always affects both eyes.” This was true of 3 children of the group, of whom 2 had had operative treatment—successful in each case in only one eye, and resulting in a corrected vision of 6/18. The operations on the other eye had in both instances failed to produce a clear aperture in the lens capsule and the resulting vision was no more than the ability to distinguish light from darkness. No further treatment was possible in either case. The third child with bilateral zonular cataracts had a uniform opaque disc in her



right eye with a ring of punctate peripheral lental opacities causing no interference with normal vision on the left side. The remaining 4 cases of zonular cataracts were exceptional in that they were unilateral.

Group B (i).—Here the history of an acute destructive inflammation of the eye beginning during, or immediately after birth, established the diagnosis of a gonorrhœal infection.

In Group B (ii) to (v) however, it was not possible to specify the causative organism of an already healed lesion.

Group C (i).—Here, two cases of birth injury showed a circumscribed patch of old inflammation at the macula with a history of difficult labours. One child was said to have been born with a bad black eye ; the other was an instrumental delivery. A third case with a similar traumatic lesion was included in this group of birth injuries in the absence of any other history.

Group C (ii).—In all these cases the injured eyeball had been excised at the time of the accident in order to prevent the onset of sympathetic inflammation in the other eye.

Group C (iii).—The result of all 3 cases of corneal wounds was a central corneal nebula and in one eye there was in addition a traumatic cataract.

Group C (iv).—These 5 cases where the loss of sight was attributed to a blow on the side of the head are interesting from the point of view of the nature of the fundus changes found. The first was a boy who had been involved in a street accident and struck his head against the handle bars of a motor bicycle. His fundus showed the remains of a large preretinal hæmorrhage and the vision in the injured eye was less than 6/60. Another boy had an optic atrophy caused by a motor car accident and reducing the vision in his left eye to less than 6/60. Two cases of macular chorioiditis had resulted from contusion of the eyeball from injury in early life. The origin of the anterior chorioiditis in the fifth case was more obscure. The history was that the boy had developed an external squint following severe scalds of the head, neck and back. The association of the fundus changes with the accident is not very obvious, and it would perhaps be more reasonable to suppose that the shock of the burns had caused a strabismus in an already defective eye. In view of the history and in the absence of the results of a Wassermann reaction, I have provisionally included this case as one of trauma.

As the visual acuity of the better eye is of the utmost importance in these children, I shall give below a table shewing this, expressed in terms of their ability to read Snellen's types at a distance of 6 metres, together with a brief review of the factors which interfered with vision where this fell short of a 6/12 standard.

Vision in better eye.	Number of cases.
6/24	1
6/18	3
6/12	4
6/9	9
6/6	36
Unable to read	6
	—
	59
	—

The case with vision 6/24 was one of ophthalmia neonatorum which had caused a shrunken globe of the left side and a corneal nebula on the right.

Two of the children with vision 6/18 in the better eye were those I have described previously as having had operative treatment for bilateral zonular cataracts. The third was a child aged 8 who had had keratitis in both eyes 4 years previously, with the result that her vision was 6/36 and 6/18, while the fourth child was one of bilateral rotatory nystagmus associated with a unilateral birth injury.

Myopia with early fundus changes was responsible for 3 of the 4 cases in whom the vision was 6/12 (this was of course with the focus properly corrected.)

It is gratifying to note that 45 of these 59 children had vision of 6/9 or 6/6 in their one useful eye and that, with the exception of 3 cases, this was attained without the aid of glasses.

Although there are 4 cases of myopia in whom the corrected vision in the good eye was 6/12, the prognosis for the preservation of useful sight was, I think, reasonably good. In only one of the remaining 55 cases would it be justifiable to predict with certainty that the child would be blind within the meaning of the Blind Persons Act on attaining the age of 16. This was the mentally defective girl with high progressive myopia who was unable to read and whose refractive error at the age of 13½ years was -13.OD. right and -14.OD. left.

# ELEMENTARY SCHOOLS.

## TABLE I.

### A.—Routine Medical Inspections.

Year ended 31st December, 1935.

Number of Code Group Inspections.

Entrants	....	....	....	....	....	4,082
Second Age Group	....	....	....	....	....	3,614
Third Age Group	....	....	....	....	....	4,579
Total						12,275

Number of other Routine Inspections .... 409

### B.—Other Inspections.

Number of Special Inspections	....	....	....	2,905
Number of Re-Inspections	....	....	....	3,598
Total				6,503



TABLE II.

**A.—Return of Defects found by Medical Inspection in the Year  
ended 31st December, 1935.**

DEFECT OR DISEASE.					ROUTINE INSPECTIONS.		SPECIAL INSPECTIONS.		
					No. of Defects.		No. of Defects.		
					Requiring Treatment.	Requiring to be kept under observation, but <i>not</i> requiring Treatment.	Requiring Treatment.	Requiring to be kept under observation, but <i>not</i> requiring Treatment.	
(1)					(2)	(3)	(4)	(5)	
SKIN	Malnutrition	....	....	....	23	6	32	3	
	{	Ringworm :							
		Scalp	....	....	....	2	—	8	—
		Body	....	....	....	3	—	16	—
		Scabies	....	....	....	5	3	13	—
		Impetigo	....	....	....	22	7	141	—
EYE	{	Other Diseases (Non-Tuberculous)			27	10	125	2	
		Blepharitis	....	....	....	73	9	85	—
	{	Conjunctivitis	....	....	....	15	5	33	—
		Keratitis	....	....	....	—	—	1	—
		Corneal Opacities	....	....	....	1	3	—	—
		Defective Vision (excluding Squint)	....			689	128	342	18
EAR	{	Squint	....	....	....	142	35	42	2
		Other Conditions	....	....	....	28	12	41	6
	{	Defective Hearing	....	....	....	12	8	20	3
		Otitis Media	....	....	....	40	12	69	3
		Other Ear Diseases	....	....	....	7	3	48	7
		NOSE AND THROAT	{	Chronic Tonsillitis only	....		493	598	110
Adenoids only	....			....	69	45	45	4	
Chronic Tonsillitis & Adenoids	....				151	56	167	11	
Other Conditions	....			....	13	8	43	4	
ENLARGED CERVICAL GLANDS (Non-Tuberculous)					14	73	21	2	
DEFECTIVE SPEECH					1	8	—	1	
HEART AND CIRCULATION	{	Heart Disease :							
		Organic	....	....	....	24	21	15	—
		Functional	....	....	....	10	15	2	1
LUNGS	{	Anæmia	....	....	....	41	17	13	2
		Bronchitis	....	....	....	19	27	9	1
		Other Non-Tuberculous Diseases	....			11	10	18	2
TUBERCULOSIS	{	Pulmonary :							
		Definite	....	....	....	—	—	—	—
		Suspected	....	....	....	—	6	5	—
		Non-Pulmonary :							
		Glands	....	....	....	2	—	4	1
		Bones and Joints	....			5	2	3	—
NERVOUS SYSTEM	{	Skin	....	....	....	—	—	—	—
		Other Forms	....	....	....	2	3	—	—
		Epilepsy	....	....	....	2	4	7	—
		Chorea	....	....	....	3	—	8	2
DEFORMITIES	{	Other Conditions	....	....	....	1	—	1	—
		Rickets	....	....	....	4	2	—	—
		Spinal Curvature	....	....	....	4	—	3	1
		Other Forms	....	....	....	33	41	25	1
Other Defects and Diseases					75	96	294	41	
					2,043	1,267	1,777	125	

TABLE II.—continued.

**B.—Number of individual Children found at Routine Medical Inspection to require Treatment (excluding Uncleanliness and Dental Diseases).**

Group.  (1)	Number of Children.		Percentage of Children found to require Treatment.  (4)
	Inspected.  (2)	Found to re- quire Treatment.  (3)	
GROUPS :			
Entrants ....	4,082	548	13.4%
Second Age Group	3,614	564	15.6%
Third Age Group ....	4,579	714	15.6%
Total ....	12,275	1,826	14.9%
Other Routine Inspections ....	409	78	19.7%
Grand Total ....	12,684	1,904	15.0%

**C.—Classification of the Nutrition of Children Inspected during the Year in the Routine Age Groups.**

Age-groups	No. of Chil- dren Insp'd	A (Excellent)		B (Normal)		C (Slightly sub- normal)		D (Bad)	
		No.	%	No.	%	No.	%	No.	%
Entrants ....	4082	525	12.9	3358	82.3	191	4.7	8	0.2
Second Age-group ....	3614	477	13.2	2934	81.2	195	5.4	8	0.2
Third Age-group ....	4579	817	17.8	3468	75.7	280	6.1	14	0.3
Other Routine Inspections ....	409	70	17.1	316	77.3	21	5.1	2	0.5
TOTAL ....	12684	1889	14.9	10076	79.4	687	5.4	32	0.3

TABLE III.

## Return of all Exceptional Children in the Area.

## CHILDREN SUFFERING FROM MULTIPLE DEFECTS.

Children suffering from the following types of Multiple Defect, *i.e.*, any combination of Total Blindness, Total Deafness, Mental Defect, Epilepsy, Active Tuberculosis, Crippling, or Heart Disease

11

## BLIND CHILDREN.

At Certified Schools for the Blind.	At Public Elementary Schools.	At Other Institutions.	At no School or Institution.	Total.
4	—	—	1	5

## PARTIALLY BLIND CHILDREN.

At Certified Schools for the Blind.	At Certified Schools for the Partially Blind.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
10	—	8	—	1	19

## DEAF CHILDREN.

At Certified Schools for the Deaf.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
12	—	—	2	14



TABLE III.—continued.

## PARTIALLY DEAF CHILDREN.

At Certified Schools for the Deaf.	At Certified Schools for the Partially Deaf.	At Public Elementary Schools.	At other Institu- tions.	At no School or Insti- tution.	Total.
—	—	—	—	—	—

## MENTALLY DEFECTIVE CHILDREN.

## FEEBLE-MINDED CHILDREN.

At Certified Schools for Mentally Defective Children.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
9	190	2	68	269

Notified to the Local Mental Deficiency Authority <i>during the year</i> ....	Males	Females	Total
	12	13	25

## EPILEPTIC CHILDREN.

## CHILDREN SUFFERING FROM SEVERE EPILEPSY.

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
1	—	—	7	8

TABLE III.—continued.

## PHYSICALLY DEFECTIVE CHILDREN.

## A. TUBERCULOUS CHILDREN.

*I.—Children suffering from Pulmonary Tuberculosis.*

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
7	31	1	16	55

*II.—Children suffering from Non-Pulmonary Tuberculosis.*

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
19	63	1	12	95

## B.—DELICATE CHILDREN.

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
1	159	—	28	188

## C.—CRIPPLED CHILDREN.

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
19	164	—	52	235

TABLE III.—continued.

## D.—CHILDREN WITH HEART DISEASE.

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At No School or Institution.	Total.
—	32	—	10	42

TABLE IV.

Return of Defects treated during the year ended  
31st December, 1935.

## TREATMENT TABLE.

*Group I.—Minor Ailments (excluding Uncleanliness, for  
which see Group V I.)*

Disease or Defect.	Number of Defects treated, or under treatment during the year.		
	Under the Authority's Scheme.	Otherwise.	Total.
(1)	(2)	(3)	(4)
<i>Skin—</i>			
Ringworm-Scalp—			
(i.) X-Ray Treatment	—	—	—
(ii.) Other Treatment	8	14	22
Ringworm-Body ....	16	3	19
Scabies ....	13	7	20
Impetigo ....	141	110	251
Other skin disease ....	125	8	133
<i>Minor Eye Defects—</i>			
(External and other, but excluding cases falling in Group II.) ....	160	17	177
<i>Minor Ear Defects</i> ....	117	19	136
<i>Miscellaneous—</i>			
(e.g., minor injuries, bruises, sores, chilblains, etc.)	762	42	804
TOTAL ....	1,342	220	1,562



TABLE IV.—continued.

*Group I I.—Defective Vision and Squint (excluding Minor Eye Defects treated as Minor Ailments—Group I.)*

Defect or Disease.	No. of Defects dealt with.			No. of children for whom spectacles were			
	Under the Authority's Scheme.	Otherwise.	Total.	Prescribed (1)		Obtained (2)	
				(i) Under the Authority's Scheme.	(ii) Other-wise.	(i) Under the Authority's Scheme.	(ii) Other-wise.
Errors of Refraction (including squint). (Operations for squint should be recorded separately in the body of the School Medical Officer's Report) ....	1,707	51	1,758	—	—	—	—
Other Defect or Disease of the Eyes (excluding those recorded in Group I.)	132	—	132	—	—	—	—
Total ....	1,839	51	1,890	1,513	51	1,408	24

*Group I I I.—Treatment of Defects of Nose and Throat.*

Number of Defects													
Received Operative Treatment.												Received other forms of Treatment.	Total number treated.
Under the Authority's Scheme, in Clinic or Hospital.				By Private Practitioner or Hospital, apart from the Authority's Scheme.				Total.					
(1)				(2)				(3)					
(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)		
—	4	308	2	—	—	54	—	—	4	362	2	—	
													368

(i) Tonsils only. (ii) Adenoids only. (iii) Tonsils and adenoids. (iv) Other defects of the nose and throat.

TABLE IV.—continued.

Group IV.—Orthopaedic and Postural Defects.

	Under the Authority's Scheme. (1)			Otherwise. (2)			Tot number treated.
	Residential treatment with education.	Residential treatment without education.	Non- residential treatment at an orthopaedic clinic.	Residential treatment with education.	Residential treatment without education.	Non- residential treatment at an orthopaedic clinic.	
	(i)	(ii)	(iii)	(i)	(ii)	(iii)	
Number of children treated	40	1	282	—	—	—	323

Group V.—Dental Defects.

- (1) Number of Children who were :—  
    (a) Inspected by the Dentist :

Routine Age Groups	Age. No.	} Total 25,440
	5...2478	
	6...2726	
	7...2701	
	8...2853	
	9...2736	
	10...2808	
	11...3071	
	12...2942	
	13...2609	
	14.... 497	
	15.... 19	
Specials ....		903
GRAND TOTAL ....		26,343
(b) Found to require treatment ....	....	14,350
(c) Actually treated ....	....	9,618

- (2) Half-days devoted to { Inspection.... 270 }  
                                  { Treatment 1,680 }      Total      1,950  
(3) Attendances made by children for treatment ....      13,148

*Group V. Dental Defects—continued.*

(4) Fillings	....	....	{ Permanent teeth 14,111 }						
			{ Temporary teeth 22 }	Total	14,133				
(5) Extractions	....		{ Permanent teeth 1,401 }						
			{ Temporary teeth 10,067 }	Total	11,468				
(6) Administrations of general anæsthetics for extractions					171				
(7) Other operations			{ Permanent teeth 88 }						
			{ Temporary teeth 231 }	Total	319				

*Group VI.—Uncleanliness and Verminous Conditions.*

(i.) Average number of visits per school made during the year by the School Nurses	....	....	....	6
(ii.) Total number of examinations of children in the Schools by School Nurses	....	....	....	108,393
(iii.) Number of individual children found unclean	....			5,135
(iv.) Number of children cleansed under arrangements made by the Local Education Authority	....			—
(v.) Number of cases in which legal proceedings were taken :—				
(a) Under the Education Act, 1921	....	....		—
(b) Under School Attendance Byelaws	....	....		—



## SECONDARY SCHOOLS.

### TABLE I.

**Number of Children Inspected from 1st January, 1935 to  
31st December, 1935.**

#### A.—Routine Inspections.

Age	5	6	7	8	9	10	11	12	13	14	15	16	17	Total
Males	1	—	—	5	15	24	130	236	45	40	257	41	1	795
Females	6	6	3	11	12	32	108	247	22	23	215	7	—	692
Total	7	6	3	16	27	56	238	483	67	63	472	48	1	1,487

#### B.—Special Inspections.

	Specials.	Re-Inspections.
Males      ....      ....	3	76
Females      ....      ....	5	61
Total      ....      ....	8	137

#### C.—Total Number of Individual Children Inspected by the Medical Officers whether as Routine or Special cases.

Number of individual children inspected      ....      ....      1,632

TABLE II.

## A.—Return of Defects found in the course of Routine Medical Inspection in 1935.

Defect or Disease.				ROUTINE INSPECTIONS.	
				Number referred for Treatment.	Number required to be kept under observation but not referred for treatment.
MALNUTRITION	....	....	....	2	6
UNCLEANLINESS,	Head	....	....	1	—
SKIN	{	Impetigo	....	—	—
		Scabies	....	—	—
		Other Diseases—non-Tuberculous	....	1	5
EYE	{	Defective Vision	....	140	89
		Squint	....	3	1
		External Diseases	....	7	1
EAR	{	Defective Hearing	....	2	2
		Ear Disease	....	—	3
NOSE AND THROAT	{	Enlarged Tonsils and Adenoids	....	6	3
		Enlarged Tonsils	....	42	48
		Adenoids	....	4	4
		Other Conditions	....	4	2
TEETH	....	....	....	—	40
CERVICAL GLANDS	....	....	....	2	2
DEFECTIVE SPEECH	....	....	....	—	1
HEART	{	Organic	....	3	3
		Functional	....	—	1
		Anæmia	....	3	3
LUNGS—Non-Tubercular Diseases	....	....	....	2	1
TUBERCULOSIS	{	Definite	....	—	—
PULMONARY		Suspected	....	—	—
NERVOUS SYSTEM	{	Chorea	....	—	1
		Other Conditions	....	—	1
		Spinal Curvature	....	3	8
DEFORMITIES	{	Flat Foot	....	61	24
		Other Conditions	....	5	6
ENLARGED THYROID GLAND	....	....	....	1	—
OTHER DISEASES OR DEFECTS....	....	....	....	6	2

## B.—Number of Individual Children found at Routine Medical Inspection to require treatment (excluding Uncleanliness and Dental Diseases.)

Number inspected	....	....	....	1,487
Requiring treatment	....	....	....	264
Percentage requiring treatment	....	....	....	17.7%





